

THE DEFINITIVE GUIDE TO THE MAKING OF DOCTOR WHO

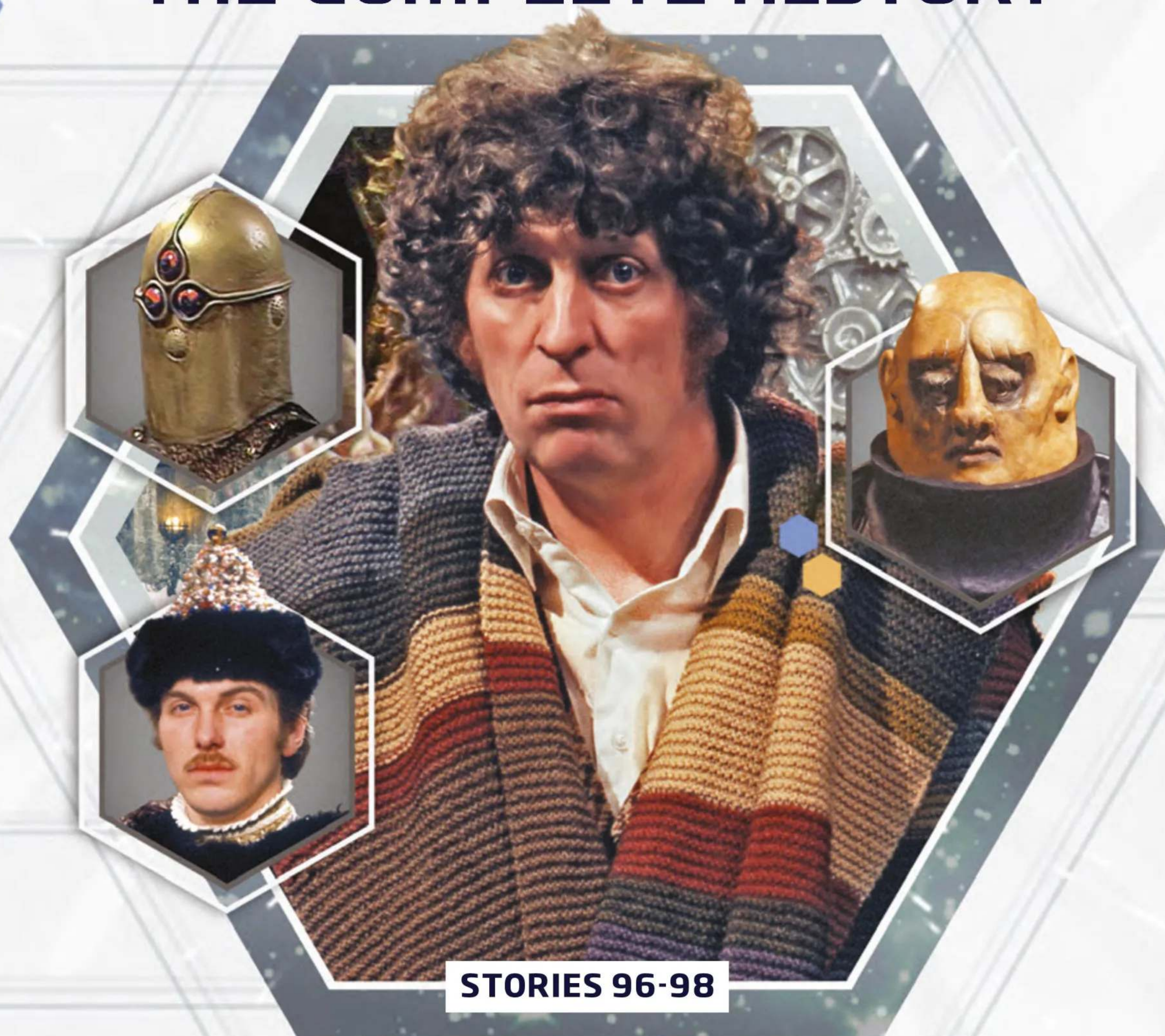
BBC

DOCTOR WHO



THE **FOURTH**
DOCTOR

THE COMPLETE HISTORY



STORIES 96-98

UNDERWORLD,
THE INVASION OF TIME
AND THE RIBOS OPERATION





BBC

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THE COMPLETE HISTORY

UNDERWORLD

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'IT'S HARD TO IMAGINE
DOCTOR WHO WITHOUT
THE TIME LORDS.'

Welcome

It's hard to imagine *Doctor Who* without the Time Lords, isn't it? They've become such an integral part of the show's mythos, reverentially mentioned in many stories in which, other than the Doctor himself, they don't even make an appearance.

It's hard to imagine that there was a time before Time Lords, but of course the first six years of the series trundled along with the Doctor's origins shrouded in mystery. Even when the Doctor bumped into one of his own people in *The Time Meddler* [1965 – see Volume 5], nothing was given away, and we were left none-much-the-wiser by the end of the story. With *The War Games*



[1969 – see Volume 14] though, all was revealed. From that point on, the Time Lords became part and parcel of *Doctor Who*. Even after their supposed destruction prior to *Rose* [2005 – see Volume 48], the Doctor's people cast a long shadow over his adventures.

All three stories in this volume of *Doctor Who – The Complete History* feature the Time Lords in one way or another. *Underworld* [1978 – see page 6] reveals the reason for the Time Lords' policy of not interfering in the affairs of other planets. Their good intentions ultimately led to the destruction of the planet Minyos and the near-extinction of its population. Not wanting to risk the same happening again, the Time Lords pulled up the drawbridge and settled for watching the universe through their space telescopes.

The Invasion of Time [1978 – see page 40] is a full-on Gallifreyan romp, and only the second story to be set entirely on the Doctor's home planet. Something of a sequel to *The Deadly Assassin* [1976 – see Volume 26], *The Invasion of Time* similarly reveals the Time Lords to be not quite as all-powerful and omnipotent as we'd previously been led to believe.

It's perhaps due to this slightly tarnished reputation that *The Ribos Operation* [1978 – see page 92] introduces us to the Guardians, who really are all-powerful and omnipotent. The White Guardian, masquerading as the Time Lord President, assigns Time Lady Romanadvoratrelundar to aid the Doctor in his search for the six segments of the Key to Time...

John Ainsworth – Editor



Left:

Time Lady Romana was assigned to help the Doctor search for the six segments of the Key to Time.



UNDERWORLD

► STORY 96

The quest is the quest... On the very edge of the universe, the TARDIS lands on an ancient spaceship. The ship's crew members are from the destroyed world of Minyos, and are on a centuries-long mission to retrieve the race banks that could restore their people to life.



'FOLLOWING A SURPRISE
REGENERATION, WE LEARN
THE CIRCUMSTANCES OF
THE TIME LORD POLICY
OF NON-INTERVENTION.'

Introduction

Tom Baker certainly made his mark on *Doctor Who*. Many Fourth Doctor stories are held up as the very best the series has to offer. Over seven glorious years, Baker delivered a range of wildly different stories to great critical acclaim.

Fan consensus singles out *Underworld* as the weakest and least-loved of this lauded period of the show's history. It certainly struggled to compete with so many of those stories that are considered to be an unqualified success but, to be fair, it delivered many things we expect of a *Doctor Who* story.

There's no getting around it: *Underworld* suffered from its already-small budget being squeezed. It wasn't especially noticeable in Part One however – the Minyans' costumes and make-up were pleasing and the interior of their spaceship (later reflected in the Oracle's inner

sanctum) was a satisfyingly original design. Throughout the story there was some particularly accomplished model work. Even the less successful material in subsequent episodes, where in a money-saving move characters were keyed into a model of some caves, was given some life by careful choreography of the actors.

You could argue that the Seers and the Oracle weren't especially effective bad guys. The Oracle itself, was the kind of power-mad computer following its programming to the detriment of the local population – like Xoanon in *The Face of Evil* [1977 – see Volume 26] or Drathro in *The Trial of a Time Lord* [1986 – see Volume 42] who also carried out strategic culls of his 'work units'. But even if the Oracle and its acolytes weren't the most powerful enemy, there was something spooky about this particular mad computer's almost-whispered pattern of speech.

Like any number of *Doctor Who* stories from *The Myth Makers* [1965 – see Volume 6] to *The God Complex* [2011 – see Volume 69], *Underworld* sought inspiration from Greek myths and legends. But the script was also full of fun science-fiction concepts – a pacifying ray, 'magnetic' chairs, and the beautifully crafted shield guns.

Most significantly, however, *Underworld* should be remembered for the contribution it made to the wider mythology of *Doctor Who*. Following a surprise regeneration in Part One, we then learnt about the circumstances in which the Time Lords decided to establish a policy of non-intervention. Their status as gods in this story was a precursor to the next, which found this mighty race under threat... ■

Left:
Power mad...
Drathro in
*The Trial of
a Time Lord*.



PART ONE

The TARDIS comes to a halt at the edge of the cosmos – but K9 warns the Doctor and Leela that they are not alone. A spacecraft is nearby, within a spiral nebula. [1] The TARDIS lands on board in a storeroom.

The *R1C* is piloted by a man called Jackson, assisted by Orfe, Herrick and Tala. They hear the sound of the TARDIS landing and identify it as the sound of the relative dimensional stabiliser, as used in the “time ships of the gods”. [2]

The Doctor realises he is on board a Minyan ship. But the Minyan civilisation was on the other side of the universe. He explains that after the Time Lords gave the Minyans medical and scientific aid and better weapons, the Minyans destroyed their own planet. [3] Leela finds a ‘shield gun’ and uses it to blast the storeroom door.

Orfe wonders if the ‘gods’ will help them with their quest. Tala collapses, dying of old age. The Doctor and Leela enter the bridge. Orfe fires a beam at Leela, pacifying her. Herrick carries Tala to the regeneration unit. Jackson explains their mission has lasted a hundred thousand years, searching for a missing spaceship, the *P7E*, containing a race bank with which they could populate a new planet. [4] The Doctor utilises K9 to help them avoid being sucked into the nebula.

Tala is artificially regenerated back to her youth. [5] K9 restores the power, enabling the ship to pick up a signal from the *P7E* which is inside the nebula. The Doctor warns against going in there but Jackson is determined and the *R1C* enters the whirlpool in space. It passes through a layer of asteroids which start to stick to the ship’s hull, burying it alive. [6] Their only chance is to blast their way out – but the laser cannon overheats!





PART TWO

The *R1C* blasts itself free of the asteroids, and picks up the signal from the *P7E*. It is coming from a planet that has formed around it. The *R1C* crashes into it, [1] but the planet is still soft and they slow down as their ship buries itself.

It sets off a rock fall, disturbing the underground inhabitants, the Troggs. [2] The 'skyfall' is reported to the guards, led by a man called Rask.

A Trog called Idmon tries to rouse his fellow slaves into an escape attempt. Rask arrests him and his son, Idas, flees through the tunnels.

Herrick blasts a way through the rock wall into a tunnel. The disturbance is detected by the guards, but Herrick and Jackson hide from the remote surveillance system. [3]

They set off on their quest with Orfe and Tala. The Doctor and Leela

wait for them to go, then explore the tunnels themselves. Idas runs into them, pursued by Rask and some other guards. The Doctor and Leela hide in a mine cart then return to the *R1C*, where they find Idas.

Going ahead of the others, Herrick runs into another one of the guards. Herrick reflects the guard's weapon back at him, killing him, and picks up his radio communicator. He identifies himself as 'Trog Herrick'. [4]

Back in the guards' control room, the head guard, Tarn, orders Rask to close tunnel nine for fumigation. A door slides down in the tunnel, cutting off Herrick from Jackson, Orfe and Tala.

The Doctor helps treat Idas' injuries. Idas recalls a prophecy that one day gods will come and set them free. [5]

They emerge into a tunnel and see thick, swirling gas. The Doctor sends Leela and Idas back into the *R1C*, then desperately attempts to reverse the air flow of one of the gas vents... [6]

PART THREE

The Doctor succeeds and the fumigation gas is sucked back through the vent.

Jackson, Orfe and Tala blast through the bulkhead and find Herrick. He shows Jackson the guard's communicator. It is from the *P7E*. [1]

The Doctor returns to Leela and Idas. Idas tells him that the guards are ruled by the Seers, who make sacrifices to the mysterious Oracle.

The Doctor sends K9 to find Jackson. Idas warns that the way leading to the citadel is guarded by invisible dragons. It is merely a forcefield which Leela destroys. The Doctor, Leela and Idas enter and float down a weightless shaft. [2]

The control room of the *P7E* is now a temple to the Oracle. A sword is suspended above Idmon, and a lamp is placed beneath the rope holding the sword in place. [3]

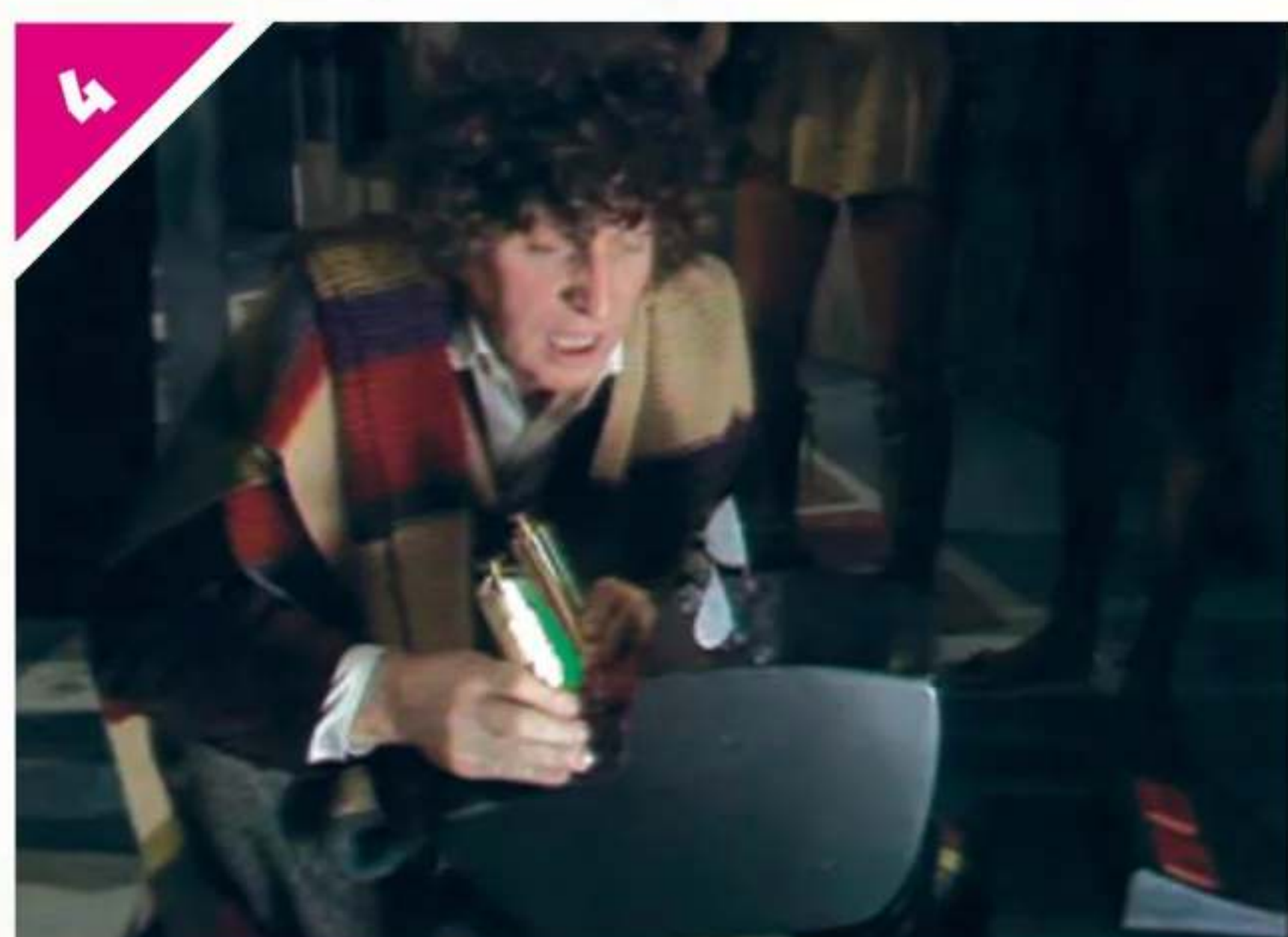
K9 finds Jackson and the other Minyans. The Doctor, Leela and Idas reach a wooden bridge, where they are captured by the guards and led into the temple. Idas saves his father and they make their escape in the ensuing chaos. Herrick shoots some of the guards, enabling them to flee across the bridge. He stays behind while the others get away and collapses beneath a hail of laser beams. [4]

K9 leads everyone into a cave where they rest. A young female Trog, Naia, explains that they collect rock for the crushers which is reprocessed into food. The Doctor suggests they enter the citadel via the crushers.

The Seers interrogate Herrick and he confirms he came in search of the race bank. The Seers reveal they are no longer humanoid. Under their hoods they reveal bronze-coloured, three-eyed heads. [5]

The Doctor and Leela hide in a mine cart [6] pushed by Idmon and Idas. Idmon slips – and the Doctor and Leela are tipped into the crusher!





PART FOUR

The Doctor and Leela cling to the edge of the cart. Jackson, Orfe and Tala attack the guards and Jackson and Idas pull the Doctor and Leela to safety.

They return to the cave with K9 and the freed Tregs. Jackson mounts an attack on the guards to provide a diversion for the Doctor, Leela and Idas to enter the citadel via a ventilation duct. [1]

One of the Seers suggests giving the Minyans the race bank cylinders and they ask Herrick to describe them. The Seers go to the temple and retrieve the two cylinders.

Jackson, Orfe and Tala are fighting the guards when Rask calls for a truce. Herrick appears, carrying the cylinders. "The quest is over!" [2]

The Doctor enters the temple and confronts the Oracle. [3] The Doctor deduces that it still has the race banks. He then uses a sword to release the genuine

cylinders, then escapes with Leela and Idas. The guards set off two skyfalls, trapping them in a tunnel. But K9 locates them and blasts them free.


The Doctor rushes into the bridge of the *R1C* and gives Jackson the genuine race banks and takes the fake ones. K9 examines them, detecting explosive contents in excess of 2,000 megatons. [4]

The Doctor hands over the two booby-trapped cylinders to Rask and they are returned to the Oracle.

The Doctor leads the Tregs into the *R1C*. [5] Jackson protests, saying they won't be able to take off with the extra weight.

Too late, the Oracle realises it has the wrong cylinders. The planet explodes and the *R1C* rides the shockwave out of the nebula.

The Doctor and Leela bid Jackson and the others farewell. The Doctor accidentally calls him 'Jason', remembering a myth about a man who found the golden fleece at the end of the world. [6]



'THE REGENERATION OF TALA IN PART ONE WAS DESCRIBED AS A MORE HARROWING PROCESS THAN WHAT EVENTUALLY APPEARED ON SCREEN.'

Pre-production

New script editor Anthony Read joined the *Doctor Who* production team formally with *Underworld*, although he had trailed his predecessor Robert Holmes since *The Invisible Enemy* [1977 – see Volume 27] and received a co-credit on the scripts for *Image of the Fendahl* [1977 – see Volume 27]. Holmes' first suggestion for new script editor had been his predecessor in the role, Terrance Dicks, but Dicks – now involved with BBC classic serials and busy novelising *Doctor Who* stories for Target Books – declined the offer.

Anthony Read

Head of drama serials Graeme McDonald contacted Anthony Read who had been a senior producer at the BBC, helming shows such as the BBC1 business drama *The Troubleshooters* and BBC2's ex-pat series *The Lotus Eaters* before leaving to become a freelance writer in 1973. Born in April 1935, Read had trained as an actor and then moved into publishing before entering television in the early 1960s, initially at ABC and then moving to the BBC. McDonald offered Read a job back at the Corporation which Read turned down... until he heard that the post was that of script editor on *Doctor Who*. Having always liked the series, Read decided that he would like to spend a year working on it and accepted; he also hoped to write a serial for the show. Since 1975, producer Graham Williams had known Read from their work on the BBC1 police series *Z Cars*, for which Williams had



Above:

The Doctor and Jackson ponder their fate, while Tala has had enough of the Quest for the moment.

been script editor and Read had written a number of scripts; Read had also helped to train Williams as a script editor when Williams had been a floor assistant and assistant floor manager on some of Read's series. In 1976, Williams had asked Read to write a 90-minute thriller, to be made on film, for an anthology series, *The Zodiac Factor*, which the BBC had developed but eventually abandoned. Read began work at the *Doctor Who* office in mid-May.

To acquaint himself with *Doctor Who*, Read looked through previous scripts for the series which were all filed at the production office. He also had a two-month overlap period with Robert Holmes to gain advice about the technically demanding show. One of the things which he rapidly learned was that *Doctor Who* had a higher submission rate for story ideas than any other series

Connections: Savage pilot

▶ At the opening of the story, Leela is seen apparently piloting the TARDIS. It was very rare for a companion to operate the TARDIS controls, other than the ones that opened the doors and activated the scanner. However, starship pilot Steven Taylor had previously been seen at the helm of the TARDIS in *The Ark* [1966 – see Volume 7].



Connections: Steady now

► The Doctor states as fact that the universe operates on the Steady State principle. The Steady State theory reasons that the density of the matter in the universe remains unchanged because new matter is constantly being created. Although Steady State theory was popular with cosmologists at the time *Underworld* was made, it has since been widely rejected in the face of new evidence for

the more popular Big Bang theory of creation.



he had worked on... and that most of them were unusable.

The serial that was to become *Underworld* was one of Read's first commissions for the series, and to write it he approached Bob Baker and Dave Martin, the Bristol-based writing partnership who had contributed many serials since 1970, including *The Invisible Enemy*, the first serial into production for the 1977/8 series and had been discussing an idea with Holmes. Read had met Baker and Martin a few years earlier when the duo had been working on HTV's *Arthur of the Britons*, and they also came with a recommendation from Holmes as being reliable, familiar with the

format of *Doctor Who* and able to deliver a workable script quickly. This was precisely what Read wanted, as he needed to devote extra time to working with one of his old colleagues from *The Troubleshooters*, David Weir, on the planned six-part season climax – Weir being a newcomer to *Doctor Who*.

At this time, Baker and Martin were also working on *Target*, the new police series produced by former *Doctor Who* producer Philip Hinchcliffe. The writers were commissioned to write four *Underworld* scripts on Thursday 23 June 1977 with an agreed delivery date of Friday 15 July. Part One was delivered on the deadline, with Part Two arriving at the production office on Monday 18 July, Part Three on Tuesday 19 July and Part Four on Monday 25 July.

Adopting Holmes' ideas and having an aversion to stories set in Earth's history (since he believed that the Doctor should not become involved in established



events), Read continued to raid major works of legend and literature for story ideas – suggesting that the writers' source of inspiration in this instance should be the Cretan and Minoan myths of Ancient Greece, which he had studied while working on *The Lotus Eaters*. This was an idea that appealed to Dave Martin in particular.

Jason and the Argonauts

Realising that the myths were good stories and fun to adapt, the legend which Baker and Martin's storyline – *Underworld* – adopted as the core of its narrative was the story of Jason and the Argonauts and their quest for the golden fleece. The character of Commander Jackson was named after Jason (as ultimately noted by the Doctor



in Part Four), a Thessalian hero who set out in a ship called the *Argo* to recover the golden fleece from Colchis so that he may inherit the throne of Iolcus. The fleece was believed to hang on a tree in a grove guarded by a dragon (inspiring Idas' description of the underworld map in Part Three as 'The Tree'). On this quest, Jason was joined by the noblest heroes of Greece – the Argonauts – and their adventures were recorded by Greek poets and playwrights such as Pindar, Euripides, Homer and Apollonius from the third to ninth century BC. In the outline, Jackson's spaceship was named the *R1C* after *Argo*, while Minyas, the mythical founder of the Argonauts' home city of Orchomenus, gave his name to the planet Minyos.

One of the Argonauts was Heracles (becoming Herrick), the demi-god son of Zeus who had superhuman strength. The

works of Euripides and Sophocles record him as a figure of valour, endurance, violent temper and an adventurous spirit. During his labours, Heracles joined Jason's crew, but fitted in badly as he was a bigger hero than Jason himself. The last of Heracles' labours was to descend into the Underworld – the kingdom of the dead – for Cerberus, the watchdog at the gates of Hades' house.

Orfe was developed from Orpheus, a supreme minstrel and the son of Apollo. He had the ability to entrance with his song and lyre-playing, using his skills to calm the Argonauts when they became unruly (inspiring Orfe's use of the pacifier in Part One), as well as lulling to sleep the serpent guarding the tree in Are's grove where the golden fleece was held. Later in his life, Orpheus also ventured into the Underworld to recover his wife, Eurydice, a Naiad who had died of a snakebite. Orpheus didn't succeed in this quest and so Eurydice was returned to Hades, the God of the Dead and ruler of the Underworld – recorded in the works of Virgil and Ovid.

The female Minyan, Tala, was inspired by Atalanta, a beautiful and famous virgin huntress who was raised by bears and hunters. Atalanta was not actually an Argonaut, her application to enlist was turned down by Jason who feared that the presence of a single woman would inspire jealousy in the crew. The concept of Tala turning from an old woman to a young woman was possibly inspired by the tale of how Jason helped Hera when she was disguised as an old crone.

The Argonauts encountered many dangers before finding the golden

Left: Herrick is suspicious of the 'god' known as the Doctor.

Connections: From little acorns

▶ Unlike much of *Underworld's* source material, the concept of "The Tree at the End of the World", as mentioned by the Doctor in Part Three, is not mentioned in Greek mythology. It is, however, present in other mythologies, including Norse.

Right:

Jackson explains the nature of the Quest to the Doctor.

fleece. The Argo's attempt to pass through the clashing rocks at Symplegades with the help of the goddess Athena inspired the cliffhanger to Part One as the Minyan ship is buried by rocks. On the island of Colchis, the entrance to the grove of Ares was guarded by a serpent/dragon – becoming the defence system the Doctor's party encounter in Part Three.

The focus of the Minyan's search, the *P7E*, was named after Persephone, the daughter of Zeus and Demeter, associated by the Greeks with fertility – appropriate for the ship containing the Minyans' race banks. In the legends, Persephone became the wife of Hades, who carried her away to become the queen of the Underworld – just as the *P7E* becomes entrapped in its own underworld. At one point in the script, the underworld was referred to as “the realm of Hadis” from Hades, another name for the Underworld. The computer of the *P7E* names itself the Oracle, a reference to the oracle established at Delphi by Apollo to foretell the future. The two

Seers – visionary prophets, and hence an extension of the Oracle – were named Ankh and Lakh. An ankh is an Egyptian key-like cross symbol of enduring life, while Lakh hails from an Anglo-Indian term meaning ‘a hundred thousand’ (the length of time of the *R1C*'s quest).

Of the Oracle's guards, it seems that Rask was named after the nineteenth-century Danish philologist Rasmus Kristian Rask who did much work on the Greek language, while Tarn was inspired by Pauline M Tarn, a nineteenth-century English poet who



translated the works of the Greek poetess Sappho. Guard Klimt seems to hail from the Austrian painter Gustav Klimt, while the German painter Max Liebermann gave his name to the Liebermann maser weapons used by the *R1C* and *P7E* Minyans. Bob Baker was particularly keen on the idea of the weapon shields, envisaging fight sequences in which the protagonists would wear shields on their arms and move in a graceful, almost balletic fashion.

Connections: Ghost ship

On arriving on the *R1C*, the Doctor asks Leela, “Have you ever heard of the *Flying Dutchman*?” the *Flying Dutchman* is a legendary ghost ship (and not a person as the Doctor seems to imply) that was doomed to sail the seas and never put into port. The story probably has its origins in seventeenth-century nautical folklore and has been referenced

in many films, books and stage productions.



Mythology and modern science

The slaves in the script were named Troggs, stemming from troglodyte, a Greek term meaning ‘cave-dweller’. Idas and Idmon were named after two of the lesser Argonauts. Idas was either the son of King Aphareus or the god Poseidon, while Idmon – meaning ‘knowing’ – was the son of Apollo, and a seer who saw his own death while with the Argonauts at Mariandyni. Naia's name was derived from Naiad, a Greek term for ‘young woman’ which also referred to the divine water-nymph daughters of Zeus.

The mythology was also combined with modern science; an inspiration for the race bank element of the plot was an article about genetics which Baker and Martin had read in the journal *Scientific American*.

The idea of a new planet forming around a Minyan spaceship was derived from how a pearl formed around a piece of grit inside an oyster.

Read also asked the writers to feature K9 – which the writers had developed earlier in the year for *The Invisible Enemy*, and to develop scenes which would allow the Doctor to use K9 for specific applications rather than simply as a mobile gun.

The writers went to great lengths to develop a background for the Minyan crew: ‘The ship has been in space for 100,000 years. During this time the crew has cloned itself 1,000 times, each man lives from 25 to 85 and then goes into the cloner to come out as a 25 year old. But because of all the replication, the crew are all suffering from what might be called genetic fatigue. It has made them laconic, massive, slow-moving until there is the stimulus of a real emergency.

Nevertheless, they are tanned, fit and good-looking: like Greek heroes, American astronauts, Australian male models.’ The spacesuits worn by Jackson’s crew were described as being padded and ‘owing something to American football gear, and equally, something to the sculpted body armour of ancient Greece’. The regeneration of Tala in Part One was described as a more harrowing process than what eventually appeared on screen: ‘Tala is lying in something like an iron lung... it is a painful business being regenerated, but we cannot hear much of the screaming...’ The writers envisaged the Minyan crew as almost insane after their long quest, and also gave them a catchphrase – “The Quest is the

Connections: Playthings

▶ Referring to the Time Lords, Herrick says, “The gods use us for their sport.” This is taken from a speech made by Gloucester in Act 4, Scene 1 of Shakespeare’s *King Lear* in which he says: “As flies to wanton boys are we to th’ gods, they kill us for their sport.”



Below:

100,000 years on a poorly designed Minyan bed.



Connections: Repeat after me...

Writers Bob Baker and Dave Martin often liked to employ a repeated line or catchphrase in their *Doctor Who* scripts. Here it is: "The Quest is the Quest." In *The Invisible Enemy* [1977 - see Volume 27] it was, "Contact has been made," and in *The Hand of Fear* [1976 - see Volume 25] it was, "Eldrad must live!"



Right:

Jackson, Herrick and Orfe detect the signal from the P7E.

Quest." They also considered developing a spin-off science-fiction series about the *R1C* and its crew using other Greek myths as the basis for further adventures.

Originally, the script for Part One opened with the Doctor present in the TARDIS control room as the ship stopped. Looking into the scanner screen he comments that "they are at the terminus - clang, clang, everybody off. The end of the line." The script maintained established continuity with

the Doctor's own people, the Time Lords - to the Minyans, the equivalents of the gods in the Greek myths - and gave a reason for their policy of non-intervention. The Doctor's comment that he has been through regeneration "once or twice... no, I tell a lie, three times," would become "two or three times" on recording.

The script described the Minyan patrol vessel as 'a battered but sophisticated multihull spaceship with solar sails and tiny points of light pulsing from the ion drive pods'. The script indicated that 'on the underside is a stylised legend: *R1*' - although the name of the craft was changed to *R1C* for production to sound like Argosey, a name given to Jason's adventures. The writers envisaged the ship as a combination of the spaceship from the movie *Planet of the Apes* (released in 1968) and the supersonic airliner Concorde (which had entered service in January 1976), the moveable nose on the latter inspiring the adjustable forward heat shield.

To be cost-conscious in writing the scripts, the writers used a lot of tunnels which meant that one section of set could

be rearranged and recorded from different angles to represent varying locations.

The script for Part Two described the Troggs as 'little men and women; they are the descendants of the Minyans, but have bred small and thin and wiry to adapt to living underground for 1,000,000 years.' It was indicated that when the Doctor first ventured out of the *R1C* he would hum 'the Can Can bit' from Jacques Offenbach's 1858 operetta *Orphée aux enfers* (*Orpheus in the Underworld*). A change from the script for Part Three was that originally the Doctor uses his sonic screwdriver to help him force his way past the doorway guarded by dragons, whereas in the broadcast version it is simply blasted by Leela using a Leibemann maser.

Ankh was described as wearing a 'purple cloak with Ku Klux Klan eye slits in the hood', these hiding 'glittering red eyes'. The script further indicated that





‘when we finally see Ankh with his hood off – he has a “metal” head: bronze like a Burton dummy, bald like [movie actor] Yul Brynner. And glittery red eyes. Being seers, they have a third eye, in their foreheads. The reason why they have metal heads is bionic: they are linked to the computer/oracle and therefore have a kind of telepathy’. Lakh was not named until much later in the scripts.

Visual effects

On Thursday 21 April, Graham Williams requested that Norman Stewart should be released from his usual production assistant duties from Monday 25 July to Friday 18 November so that he could direct *Underworld*. The Canadian Stewart had been a senior production manager for many years, and had also directed episodes of BBC series such as *The Newcomers* between 1967 and 1969. Stewart had worked on many *Doctor Who* serials in the past, as production assistant on *The Mutants* (AKA *The Daleks*) [1963/4 – see Volume 1], *Planet of Giants* [1964 – see Volume 3], *The Web Planet*

[1965 – see Volume 4], *The Savages* [1966 – see Volume 8], *The Underwater Menace* [1967 – see Volume 9], *Day of the Daleks* [1972 – see Volume 17] and – most recently – *The Invisible Enemy*. Both set designer Dick Coles and costume designer Rupert Jarvis were new to *Doctor Who*, while Cecile Hay-Arthur had previously supervised make-up on *Revenge of the Cybermen* [1975 – see Volume 23]. Visual effects were supervised by Richard Conway, who had handled *The Seeds of Doom* [1976 – see Volume 25] and *The Robots of Death* [1977 – see Volume 26], and had been an effects assistant as far back as *The Green Death* [1973 – see Volume 20]. Special sound would be handled by Dick Mills of the BBC Radiophonic Workshop who was assigned to *Underworld* in September.

Visual effects for *Underworld* were a prime concern of Williams, who had seen clips from *Star Wars* during 1977. The movie was set to open in England at New Year 1978, just as *Underworld* was to begin transmission, and the producer was conscious that the model work should look sophisticated. There were still budgetary problems for the series – a reaction to the overspending of Philip Hinchcliffe, Williams’ predecessor. This precluded early plans to film some cave sequences at Ealing studios. Instead it was decided to pour all the money into two spectacular sets for the videotape studio – a large cave system and the *R1C* interior, which could double as the *P7E*.

In the late summer, Williams took a holiday – his first in two years – and returned to find a budgetary crisis with the quotes for

Left:
Herrick
apprehends
the intruders.

Connections: Forbidden fruit



► Approaching what is known as ‘The Tree of Life’, the Doctor gives Leela an apple which she bites into even though the Doctor intended her to throw it rather than eat it. This would seem to be a reference to the biblical story of the ‘forbidden fruit’ eaten by Adam and Eve in *Genesis* (Chapters Two and Three).



Above: Orfe turns the pacification ray on Herrick.

Connections: Sword of Damocles

Idmon is to be sacrificed by the Oracle and is placed beneath a sword held by rope which will be burnt until it breaks and the sword falls. This nasty execution device is inspired by the Greek legend of the Sword of Damocles, which tells how Damocles traded places with King Dionysius but experienced the constant fear of a ruler, as represented by the sword above his throne held only by a thread.



the set design costs triple the estimated budget. With inflation running high, there was not enough money left for the series, and Williams' options were either to make

drastic cuts on *Underworld* or to scrap the six-part conclusion to the series. Coles had by then devised an expensive spaceship set, and so discussions began on how costs could be reduced elsewhere. At this point, Williams recalled a discussion he had had with Coles about producing Mervyn Peake's *Titus* trilogy for television, but using the Colour Separation Overlay (CSO) process to electronically place actors into 'sets' that were actually models or photographs. Such an approach would overcome the problems attendant in creating so many bizarre sets (the technique had been

used extensively in BBC productions such as *Candide* in *Play of the Month* and *Alice Through the Looking Glass* in 1973 as well as the heavily stylised *Chester Mystery Plays* in *Play of the Month* in 1976). Williams also recalled that some of the scenes inside the Doctor's brain and mind which had been achieved using CSO a few months earlier in *The Invisible Enemy* (on which Stewart had worked) had been very effective.

Stewart and Coles began work to see if the cave sequences could be achieved by using cheaply constructed but detailed model sets with the actors simply standing against blue CSO backdrops in studio. Both men felt confident that they could pull this off, although the pressures to complete recordings would be very great – an overrun in studio would place an impossible overtime demand on the budget. Planning the recordings took far longer than usual, and while the average rate for recording CSO material was considered to be about one minute of footage per hour of studio time,

Stewart was aware that he would need to achieve eight or nine minutes in the same period.

Another key figure involved in the very long pre-production meetings was electronic effects expert AJ Mitchell, who had worked on the series for some years. Because CSO shots required a lot of lining-up of cameras, Mitchell storyboarded these scenes as a 66-page document with Coles. Coles produced a drawing of the final shot with Stewart, and then Mitchell would suggest how minimal set elements or model vignettes could be constructed, along with camera positions to fit his technical requirements. These restrictions meant that some shots lost some of the drama which Stewart might have injected – the scenes of the Doctor working on the vane motor at the end of Part Two mainly used static camera shots, for example. Also, at the first pre-production meeting, Mitchell indicated it would not be possible to do the shots of moving light beams from the masers live in studio – a ‘gallery-only’ day to add the effects would be necessary. Eventually, Stewart’s team persuaded Read and Williams that it was possible to complete a transmittable serial in this manner.

Returning guest stars

On Monday 8 August, head of serials Graeme McDonald forwarded his comments to Williams regarding the script for Part One of *Underworld*. He noted that a reference to the *Marie Celeste* brought back memories of a previous Dalek story set on the ship (as seen in *Flight Through Eternity*, the third episode of *The Chase* [1965 – see Volume 5], as well as saying that he hoped the regeneration of Tala would not be as painful on screen as Bob Baker and Dave Martin had scripted,

and to remove Herrick’s demonstration of how he could break the Doctor’s neck with “just a little snap”.

Rehearsals at the BBC’s Acton Rehearsal Rooms began on Friday 23 September and ran until Sunday 2 October. Contracted on Wednesday 7 September, John Leeson rejoined the cast as the voice of K9 after being absent for the preceding story in production, *Image of the Fendahl*. The main guest stars for the serial were American-born James Maxwell as Jackson, who had starred in Associated-Rediffusion’s *The Hidden Truth*, the BBC2 serial *An Enemy of the State* and ABC/Thames’ *Frontier* as well as the acclaimed *The Shadow of the Tower*, and Alan Lake, the husband of actress Diana Dors, who was cast as Herrick; he had appeared in the BBC1 serial *Hereward the Wake* and Granada’s *The Contenders*. Some of the other cast had appeared in *Doctor Who* before: James Marcus, playing Rask, had been a peasant in *Invasion of the Dinosaurs* [1974 – see Volume 21] and featured in the BBC1 serial *The Chinese Puzzle*; Jimmy Gardner had been Chenchu in *Marco Polo* [1964 – see Volume 2] and now played Idmon; and Officer Klimt was Jay Neill, who had been a pikeman in *The Masque of Mandragora* [1976 – see Volume 25] and Silvey in *The Invisible Enemy* earlier the same year. Jonathan Newth, playing Orfe, had been a regular in the ATV soap *Emergency Ward 10* and had featured in the HTV film series *Pretenders* before becoming a regular on BBC1’s *The Brothers*. Stacey Tendeter – cast as Naia – had featured in Yorkshire’s children’s serial *Dominic*. ■

Connections: Old tricks



► The Doctor is inspired by “a fellow called Ulysses” when he concocts his plan to enter the Citadel by hiding inside an ore cart. Ulysses is the Roman name for the Greek hero Odysseus, who penetrated the city of Troy by hiding soldiers inside a giant wooden horse. This very event is seen in *The Myth Makers* [1965 – see Volume 6] where it was the Doctor who came up with the idea.

Production

Above:
James Maxwell
has a laugh on
the spaceship
studio set.

The first studio session for *Underworld* – the most difficult story to record in studio for Graham Williams during his tenure – took place on Monday 3 and Tuesday 4 October in TC3 at Television Centre, although it had originally been scheduled for TC4. It was hoped to complete as many of the CSO cave sequences as possible, allowing pick-ups to be performed during the second block if necessary. One of these recording sessions was visited by Geraint Jones to interview Anthony Read and write a set report for the fanzine *Gallifrey*.

Most of the studio was draped in blue CSO sheets and backdrops, with a small area set aside for the model cave sets (mainly a four-foot-square miniature made by Richard Conway) and vignettes which

would be keyed in around the actors by Mitchell.

Because of the time involved setting up the CSO shots, a rehearse/record policy was used for taping, which ran from 2.30pm to 5.30pm in the afternoon, and 7.30pm to 10pm in the evening. Recording then continued onto Tuesday 4, with an additional hour of rehearse/record from 11am to 12 noon.

Because no set changes were needed for the tunnel scenes, most taping was completed in story order – often with shots recorded by two or three cameras simultaneously, footage from which was intercut in editing.

For some of the more complex shots in the CSO studio, Mitchell experimented with mixing three images – the model cave, the actors and foreground elements

such as rocks. This time-consuming process required an image of the rocks to be fed to a monitor so that Mitchell could trace their outline, place a paper cut-out of it on a light box, and then use this silhouette to key in the rocks in front of the actors. He also perfected a technique of removing a matte on cue to let an actor emerge from behind a rock, and then move in front of it in the same shot. The process was very laborious – lighting had to be matched correctly between the actors and the model sets, and the performers had to concentrate on finding their marks to ensure they did not disappear behind a section of CSO backdrop. Crowd scenes, such as the skyfall, caused particular problems, as the walk-ons were less rehearsed than the main cast and experienced difficulty with the precise movements needed for CSO work. The cast disliked this way of working as there were long pauses in recording where they had to wait in place for the images to be aligned. The strain reportedly affected all the cast, notably Tom Baker, whose working relationship with Louise Jameson was not at its best, fuelled chiefly by his confessed dislike of the character of Leela.

Skyfall

The first sequence to be taped was the skyfall in Part Two – a complex shot involving multiple levels of CSO as a model rockfall was laid both in front of and behind the Trog actors. A model shot of a surveillance camera against a tunnel background was also recorded – and inserted into various scenes during the serial.

Recording continued with the chase of Idas in Part Two, and the emergence of the Minyans. The *R1C* crew wore slightly padded spacesuits dressed with tubes and

fabric pipes. The helmets were constructed from a lightweight hessian weave and were fitted with a small visor. Conway also designed the Liebemann masers, which incorporated a working white light at the centre of the shield to help Mitchell key in an effects ray during post-production. Further recording was performed for Part Two, along with a scene for Part Three in which K9 produces a map of the tunnels for the Doctor's party (the map being stuck, out of shot, on the side of K9 and removed by Tom Baker off-screen). Towards the end of Part Two, a working model set was used for the shot of the hatchway closing to cut Herrick off from his fellow crewmates. For the scenes of the fumigation gas being flushed into the tunnels at the end of Part Two, a smoke box image was superimposed, while dry ice was pumped into the model sets, gushing from a model grille in cutaway shots.

For the sequence in Part Three where Leela fires at the entrance to the grav lift, a series of flash charges were set to detonate on cue. The grav shaft sequences were achieved using CSO; a camera recording a high-angle image of Baker, Louise Jameson and Norman Tipton was moved to create

Below:

The Doctor and Leela have come to liberate the Trog.



Connections: Made on Minyos

► The prop used as the Minyan device picked up by the Doctor on leaving the TARDIS in Part One is actually a model spaceship that had been seen in *Into the Unknown*, a serial that was part of Thames' *The Tomorrow People* recorded in January 1976 and first broadcast in February/March 1976.



an impression of their gentle downward motion against the background model shaft of green lights. It was the scenes set on the bridge leading to the entrance of the Citadel towards the end of Part Three which proved the most time-consuming, and meant that recording of the scheduled scenes would spill over into the second block. Recording on this final studio day overran the intended 10pm deadline by 90 minutes due to the time-consuming complexity of the CSO

sequences used for the cave scenes.

After a day off, rehearsals began again at Acton for the rest of the serial on Thursday 6 October and continued until Friday 14 October. For this second recording block, the team was joined by some new cast members. Godfrey James, playing Tarn, had appeared in BBC2's *Trial*, and the BBC1 serial *The Terracotta Horse* as well as *The Lotus Eaters*. Both actors playing the Seers had been on *Doctor Who* before: Frank Jarvis – Ankh – had been a Corporal in *The War Machines* [1966 – see Volume 8], while Richard Shaw – Lakh – had been Lobos in *The Space Museum* [1965 – see Volume 5] and Cross in *Frontier in Space* [1973 – see Volume 19]. By this time, Jameson had confirmed to Williams that she would not be staying on as Leela beyond the end of the current series. Williams had originally hoped that he could persuade the actress to remain after *The Invasion of Time* [1978 – see page 40], but an outline for a new companion, named Romana, was to be issued on Monday 10 October.

Also on Thursday 6 October, Baker and Jameson donned their costumes to take

part in a photocall with K9 in the streets near BBC Television Centre and on the roof terrace of the BBC Club. This was a chance for the press to obtain shots of K9, up until then a closely guarded secret, but which was to make its début on Saturday 8 in Part Two of *The Invisible Enemy* [1977 – see Volume 27]. The resultant publicity on Friday 7 included *Heaven scent... Dr Who's K9 Companion* in the *Daily Mail* and *K-9 Ps2* in the *Daily Mirror* (which referred to 'Dr Who' and 'Leeza' with their new dog) as well as a photo of the TARDIS trio in *The Guardian*. The dog also appeared on *Blue Peter* on Thursday 13, with Leeson providing the robot's unmodulated voice in an interview with John Noakes.

Recording on *Underworld* was completed with a four-day studio session from Saturday 15 to Tuesday 18 in TC3. Again, recording on the first day only took place in the afternoon and evening, with an extra hour in the morning for the next three days. This first day also saw a BBC photocall on the *R1C* flight deck, concentrating on Baker, the Minyans, and the aged Tala.

Cecile Hay-Arthur's make-up for the aged Tala consisted of cotton wool glued to Imogen Bickford-Smith's face with

Right:

The aged Tala is in need of regeneration.





latex paint, and then dabbed face powder. Unfortunately, Bickford-Smith suffered an allergic reaction to this, and a doctor had to treat her with a steroid preparation that allowed her to continue performing. Consequently, the first shot to be recorded was a technically complex one involving the old Tala – the start of the regeneration sequence for Part One in which Herrick was placed over a glass painting of many regeneration slabs by CSO, and then the made-up Bickford-Smith's face was recorded in close-up by a locked-off camera – the rest of the shot was recorded later in the schedule.

Minyan spaceship

Recording continued with the four TARDIS scenes for the serial – as a late ad-lib, Tom Baker entered the control room at the start of the story wearing a painter's smock and beret. CSO was used for the TARDIS scanner as usual, firstly to show the blackness of space and then the red spiral nebula.

Recording continued in the Minyan spaceship set, a large split-level construction

with working props, monochrome monitors (relaying binary coding for Orfe's check on the nebula and a radar sweep as Herrick checked the targeter) and a few stock computer banks. The first five scenes on the *R1C* bridge were recorded with Bickford-Smith in aged make-up. Behind the cabin windows was a large green CSO backdrop onto which images such as starscapes and the nebula could be keyed. Orfe's pacifier prop was a simple spotlight, and one of the monitors was used to replay the start of the regeneration scene which had been recorded earlier. While Bickford-Smith had her make-up removed to become the young Tala again, the scenes set in the storage room where the TARDIS lands and the corridor outside it were recorded with a roll-back-and-mix effect used for the

shot in which Leela uses the Leibemann maser to destroy the room's closed door.

Studio recording overran by five minutes when a roll-back-and-mix effect had to be performed again after an actress had blinked during the process.

Recording on Sunday 16 continued with the remaining scenes on the *R1C* bridge, with images of the heat shield, asteroids, the planet and a slurry of mud keyed in on the CSO windows of the flight deck. The usual technique of shaking the cameras was used for the scenes of the *R1C* striking the planet's solid core and emerging from the planet at the end of the episode, with clouds and debris appearing on the CSO screen. With all the scenes on the bridge

Left:

Part of the large spaceship set, with blue CSO screens beyond the windows.

Connections: Don't interfere



▶ The Time Lord policy of not interfering in the affairs of other worlds had previously been established in *The War Games* [1969 – see Volume 14], but it is here that we discover why it was adopted. As the Doctor explains to Leela: "We thought we could help. We gave them medical and scientific aid, better communications, better weapons." But this had disastrous results. "[They] kicked us out at gunpoint. Then they went to war with each other, learnt how to split the atom, discovered the toothbrush and finally split the planet."



Above:
The Doctor
joins Herrick on
the Quest.

Connections: Crazy machines

► The Doctor refers to the Oracle as “another machine with megalomania”. The Doctor has previously faced other mad computers, including WOTAN in *The War Machines* [1966 - see Volume 8], BOSS in *The Green Death* [1973 - see Volume 20] and

Xoanon in *The Face of Evil* [1977 - see Volume 26].



completed, recording moved to the airlock set of the *R1C*. This again had a CSO backdrop outside it to key in part of a model cave set, and a roll-back-and-mix effect was again used to remove the CSO screen as Herrick blasted the rocks away.

Monday 17 was devoted to all the *P7E* scenes, with the *R1C* sets redressed overnight and dirtied down. The first scene to be recorded was of Idmon held captive in Part Three, reusing Tala’s regeneration couch from Part One. Recording proceeded with scenes set on the bridge and its adjoining ducts. Welsh actress Christine Pollon (a regular in ITV’s

first soap *Sixpenny Corner* and later Janet Ellis in BBC TV’s *Compact*) spoke her lines as the Oracle off-camera, with these being modulated in studio – two yellow lights were pulsed in time to her speech on one wall.

With scenes on the main set completed, recording switched to the redressed corridor leading to the airlock. After taping the corridor scenes in Parts Three and Four, all the scenes in the *P7E* control room were recorded with the monochrome monitors relaying some scenes from the earlier recording such as the skyfall from Part Two, the grav shaft scene from Part Three and the Minyans taking their cylinders in Part Four. Dry ice gas was pumped into the set at the beginning of Part Three as the Doctor reverses the fumigation process; the use of this solid carbon dioxide to create the effect caused

Louise Jameson to suffer from a sore throat due to an allergic reaction to it. The last couple of scenes to be recorded were those in the *P7E* interrogation room – a redress of the corridor – where Herrick is questioned. Lake wore an adapted headset prop previously seen in *The Green Death*, and CSO was used to make the eyes of the metal Seer masks worn by Shaw and Jarvis glow red. Because the *P7E* sets needed to be struck, recording overran by five minutes to complete all the scenes on the spaceship.

Model shots

The final day was a race to complete the other CSO shots for the serial that had originally been scheduled for the first studio session – largely for Parts Three and Four. The studio recording also included some non-filmed model shots for Part One, such as all the shots of the TARDIS approaching the nebula and a couple of shots of the stricken *R1C* heading the same way. Another five-minute overrun was necessary to complete recording on the serial. Nevertheless, Williams was delighted that overall the team had beaten the known average of recording time in studio with CSO which he cited as previously being only one minute per hour. While he felt that the team had learnt a lot in terms of what could and could not be achieved using CSO, the producer decided that this means of working did not bear repeating.

A few model shots originally planned to be filmed were instead recorded on videotape, allowing budgetary savings, although Graham Williams' desire for good effects meant that Richard Conway was allowed to shoot model sequences of the *R1C* on 35mm film at Bray Studios. Freelance effects designer Bill Pearson made two models of the *R1C* spaceship, one of which was three-foot long. The models were suspended on wires, and given the illusion of flight often by moving the camera, rather than the model, to eliminate wobble. The shot of the *R1C* diving into the planet's surface in Part Two was achieved using a water tank filled with a thick slurry, while its escape from the asteroids was created by dropping the model through a half-shell of the rocky crust. The nebula seen in Parts One and Two was a spinning plastic spiral mounted on a turntable, distorted by reflecting its image off a sheet of Mirrorlon. Shots were also filmed of asteroids falling off the *R1C* which, when played backwards, would show them being attracted to the vessel at the end of Part One. The *R1C*'s escape from the planet in Part Four saw the model being pulled from the water tank, while a model of the smoke-enshrouded new planet was used for establishing shots in Part One and its destruction in Part Four.

Following recording on *Underworld*, on Friday 21 October K9 made a promotional appearance at a Winalot event as covered by the radio station LBC. ■

PRODUCTION

Mon 3 Oct 77 Television Centre Studio 4:
Tunnels for Part Two

Tue 4 Oct 77 Television Centre Studio 4:
Tunnels for Parts Two and Three

Sat 15 Oct 77 Television Centre Studio 4:

TARDIS; *R1C* Command Deck; *R1C* Armoury
for Part One

Sun 16 Oct 77 Television Centre Studio 3:
R1C Command Deck; *R1C* Corridor for Parts
Two-Four

Mon 17 Oct 77 Television Centre Studio

3: *P7E* Corridor; *P7E* Sacrificial
Chamber; *P7E* Security Section;
P7E Interrogation Room

Tue 18 Oct 77 Television Centre Studio 3:
Tunnels for Part Four

Post-production

Parts One and Two of *Underworld* were edited over the next two days, Wednesday 19 and Thursday 20 October, while Williams turned his attentions to salvaging *The Invasion of Time* from cancellation due to a BBC strike. When Part Three was found to underrun, some of the later sequences of the Minyans blasting the hatchway from the end of Part Two were moved back into Part Three. This left Part Two running short, and so to pad it out, some sequences were reused from other places – most notably a shot of the guards investigating the skyfall which was a scene lifted from Part Four as the guards went to arrange a truce. Extra brief shots were also used as padding, including some in the *P7E* control room, the cave system monitor camera, the four Minyans

in the caves and Idas on the run. Part One was also dubbed on Wednesday 19.

Friday 21 October saw a gallery-only day, which Williams had long fought for to allow Mitchell extra time to create his electronic effects. The producer had wanted such a day on each serial, most notably *The Invisible Enemy* where the cast had been kept waiting as beam effects were hurriedly keyed in around them. The new arrangement meant that while a studio was being derigged from another show or having sets erected, the *Doctor Who* team would have access to the recording gallery to edit extra effects using the two-inch videotape machines and Mitchell's effects kit.

For the travelling rays from the Lieberman masers, the videotape had to be rerun again and again while Mitchell

Right:
On board
the *P7E*.



marked the screen with a chinagraph pencil, lined up the effect, and re-recorded the combined image onto another tape as many times as needed. The drawback to this was that with each replay for line-up there was an increased risk of the tape shedding its oxide coating and causing drop-out on the picture. The picture image also began to sharply degrade by the fifth generation of copying. The travelling bolts were each done in two passes – the first to generate the green diamond glow that appeared on the victim or the target, and the second to add the pre-drawn green ray from the gun (achieved by moving away a card blocking the beam). Other electronic effects to be added were the lights on the ship in the spiral nebula, the red glow from the laser cannon in Part One, the white light as Herrick blasted the rock face in Part Two, the yellow arcs across the entrance to the grav shaft in Part Three and the red diamond effect of K9 disintegrating the rocks in Part Four.

Gas and fumes

Monday 24 to Wednesday 26 were spent editing Parts Three and Four. At the beginning of Part Three, the insert shot of the gas emerging from the model grille was reversed to show the fumes being sucked back to the control room. The final shot of Part Two did not appear in the reprise for Part Three. Even though extended by the material moved in from Part Two, Part Three still ran short and also lost a small part of Idas' speech to his fellow Troggs at the sacrifice. Part Four actually ran over time even after editing – lost material including two brief scenes set on the *R1C* of K9 as Jackson prepared for take-off, the scene of Herrick being interrogated in the reprise from Part Three, and a scene with Rask trying



Left:

Rays from the weapons were added in post-production.

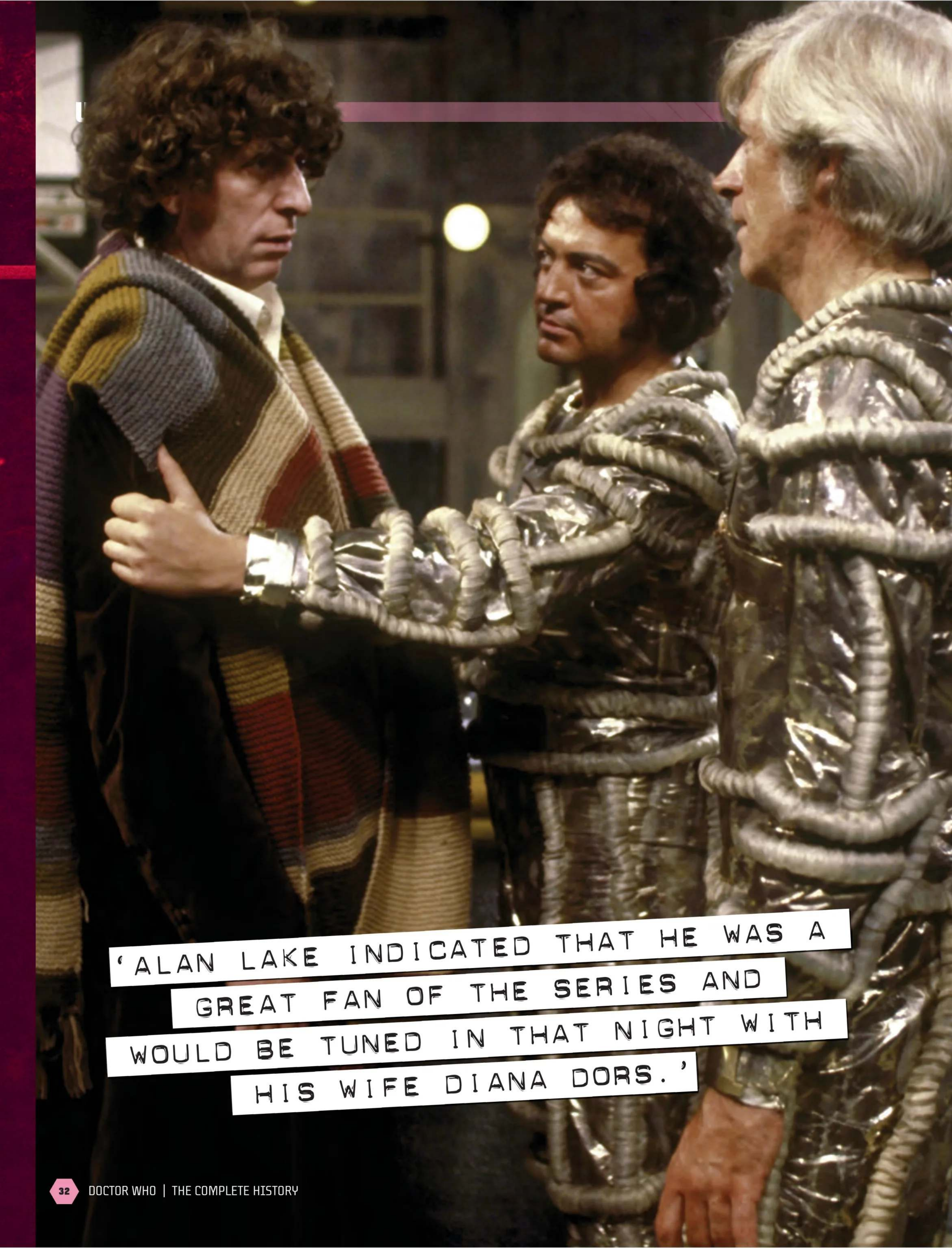
to dig through the rockfall. First edits were prepared of Parts One and Four, with second edits of Parts Two and Three.

Parts Three and Four were dubbed on Thursday 27 October, with Part Two dubbed on Sunday 30 – all three episodes having a heavy echo effect added to the voices of the actors in the cave scenes to increase the sense of scale. Incidental music recording for Parts Three and Four took place on Monday 7 November, while that for Parts One and Two was taped on Wednesday 14 December. Dudley Simpson conducted six musicians to record 21 minutes of incidental music. ■

Below:

The Doctor with the much sought-after Minyan race banks.



A scene from the television series Doctor Who. On the left, the Fourth Doctor (Tom Baker) is shown in profile, wearing his iconic multi-colored striped scarf and a dark jacket. In the center, a companion with dark hair and a concerned expression is visible. On the right, a Cyberman is shown in profile, wearing its characteristic silver, segmented, and ribbed suit. The background is a dimly lit industrial or laboratory setting with various equipment and a single bright light source.

'ALAN LAKE INDICATED THAT HE WAS A
GREAT FAN OF THE SERIES AND
WOULD BE TUNED IN THAT NIGHT WITH
HIS WIFE DIANA DORS.'

Publicity

- ▶ The Drama Early Warning Synopsis for *Underworld* was issued on Wednesday 21 September 1977, but at this stage its broadcast date was not known.
- ▶ The departure of Louise Jameson from the series was announced on Monday 7 November as recording began on *The Invasion of Time*. At once, Imogen Bickford-Smith's agent launched a press campaign to garner a higher profile for their client and maybe even a regular job on the series. In *The Sunday Mirror* on 13 November, pictures of the aged Tala and the young Imogen Bickford-Smith appeared under the headline *That's No Old Lady... That's Dr Who's Newest Dolly*, indicating that Bickford-Smith would be playing the new companion. The actress commented that she had probably won the role of Tala after she appeared in an insurance commercial in which she aged from 18 to 65, and added, "I will go along with *Dr Who* for as long as they'll have me." A similar story about her featuring in the series as 'an 85-year-old space pilot' appeared in the *Daily Express* on Tuesday 20 December under the title *Guess Who puts years on Imogen?* Alan Lake chatted to Tony Pratt of the *Daily Mirror* for the story *Who says he is a hero!* which appeared on Saturday 7 January 1978; the actor indicated that he was a great fan of the series and would be tuned in that night with his wife Diana Dors and their eight-year-old son Jason.



When the Tardis materialises in a spaceship, Dr Who becomes involved with astronaut Herrick (Alan Lake) and his eternal quest: 6.25 pm

- ▶ In *Radio Times*, the programme listing for Part One was accompanied by a black-and-white shot of the Doctor and Herrick on the *R1C*, while elsewhere in the issue a feature on the New Year season for BBC1 incorporated Roy Ellsworth's artwork of the Doctor that had been originally used for promoting *The Hand of Fear* [1976 – see Volume 25]. The serial was previewed by playwright Fay Weldon who disapproved of what she believed to be the sexist character of Leela, although she noted that her children loved the series.
- ▶ During the story's broadcast, the *Daily Mail* ran a short item about the new companion, Romana, under the title *Dr Who's quest for a blonde* on Saturday 21 January. K9 also appeared on BBC1's *Jim'll Fix It* (the show which aired before *Doctor Who*) on Saturday 28 January; a young fan had wanted to meet K9 and this item (with John Leeson providing the voice) had been recorded at Television Theatre on Wednesday 25 January.

Broadcast

Right:
Herrick at the controls.

Below:
The Doctor and Leela meet Jackson.

It was originally planned that the serial would start broadcast on Saturday 24 December 1977, and this date was given on the advance mailing of the Synopsis for the Deaf. It was replaced in the Christmas Eve schedules by a special show called *Superpets*, after which the following weekend a two-part compilation of *The Robots of Death* aired on New Year's Eve and New Year's Day, with *Underworld* resuming the new series on Saturday 7 January. During this time, John Noakes' meeting with K9 was repeated on *Blue Peter* on Thursday 29 December as one of the year's highlights.

With *Underworld*, the series moved to a later time slot after *Jim'll Fix It* – although Part Three was transmitted five minutes late at



6.30pm due to an overrun on live coverage of International Rugby Union on *Grandstand*.

On Monday 30 January 1978, Graham Williams wrote to Graeme McDonald to say that both Dudley Simpson and Dick Mills had telephoned him about the low sound level on the broadcast of Part Four.

The serial saw an improvement in the ratings for the 1977/8 series, with Part Four securing the largest audience of the run. For the first two weeks, most ITV regions networked episodes of *Man from Atlantis*, while in the Midlands ATV repeated their National Service sitcom *Get Some In!* From Saturday 21, *Man from Atlantis* was replaced by *Logan's Run*, another American science-fiction film series. Many regions moved *Logan's Run* to an earlier slot after the first week and replaced it with the documentary





series *Havoc* (ATV and many others) or episodes of *The Six Million Dollar Man* (Southern), *Code R* (Anglia) or *Happy Days* (Westward and Channel).

► *Underworld* was sold for broadcast in foreign territories that included Australia (where it was passed uncut with a ‘G’ rating), New Zealand, Nicaragua, Brazil, Ecuador and Chile. The serial was also part of a 98-episode

package of Tom Baker episodes sold to North America in 1978, where it was re-edited and given extra narration by Howard da Silva. It was also syndicated in North America as a one-hour 22-minute TV movie. *Underworld* was broadcast by UK Gold from February 1994 in episodic form, as well as an omnibus version from April 1994. BBC Prime screened the story from February 1999.

Above: Herrick and Jackson wonder what the Doctor and Leela are whispering about.

ORIGINAL TRANSMISSION

EPISODE	DATE	TIME	CHANNEL	DURATION	RATING (CHART POS)	APPRECIATION INDEX
Part One	Saturday 7 January 1978	6.25pm-6.50pm	BBC1	22' 36"	8.9M (50th)	65
Part Two	Saturday 14 January 1978	6.25pm-6.50pm	BBC1	21' 27"	9.1M (37th)	-
Part Three	Saturday 21 January 1978	6.30pm-6.55pm ¹	BBC1	22' 21"	8.9M (37th)	-
Part Four	Saturday 28 January 1978	6.25pm-6.50pm	BBC1	25' 23"	11.7M (27th)	-

¹ Broadcast five minutes late due to overrun of International Rugby Union on *Grandstand*.

Merchandise

Right:

The cover for the 2002 VHS release of the story.

Right:

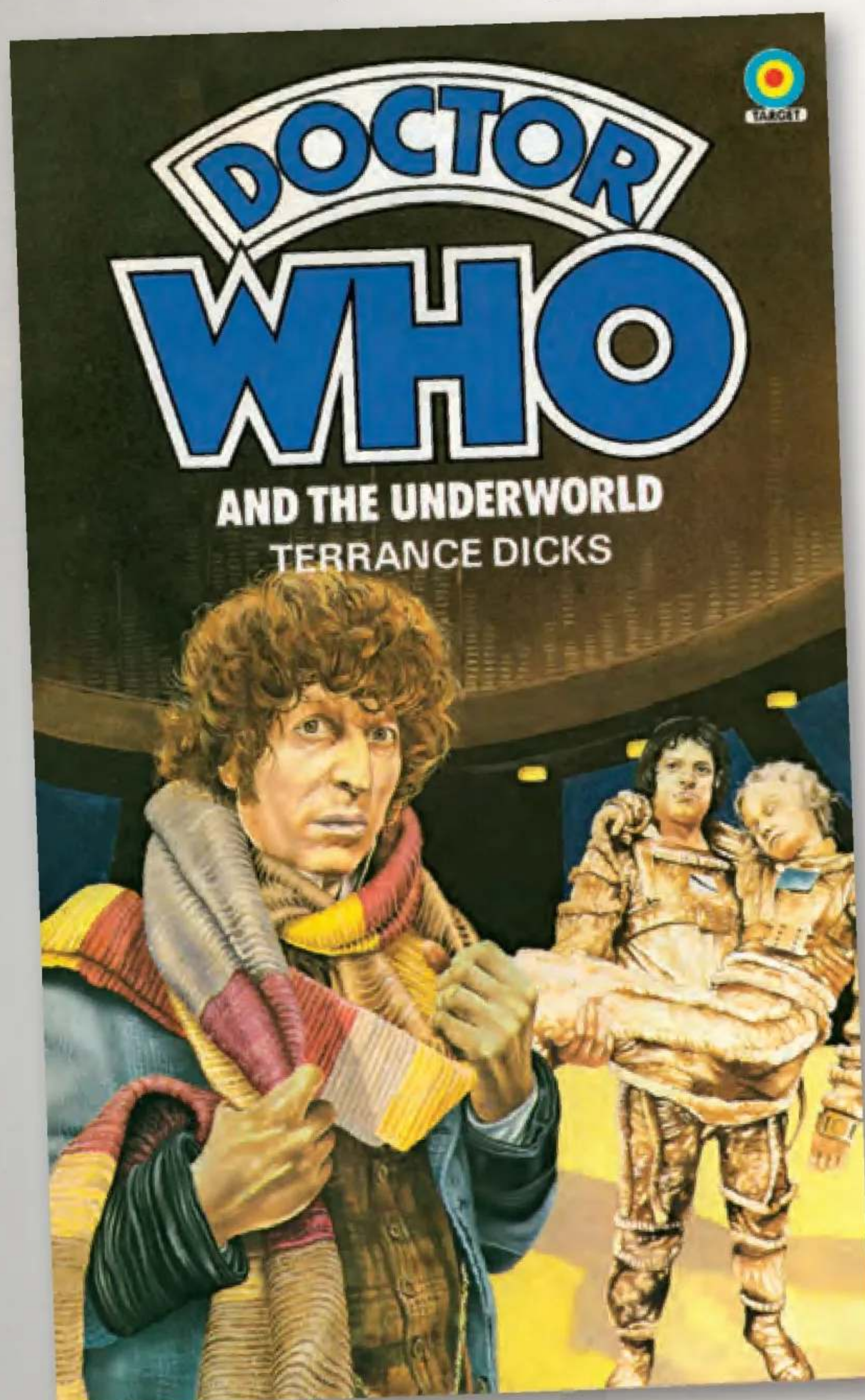
Bill Donohoe's cover for the Target novelisation.

Far right:

Clayton Hickman's illustration for the DVD cover.

The serial was novelised by Terrance Dicks as *Doctor Who and the Underworld*, with a prologue about the legend of the Time Lords and the Minyans. With a cover painting by Bill Donohoe, the book was published simultaneously in hardback from WH Allen/Wyndham and in paperback from Target in January 1980 – latterly renumbered book number 67 in the Target range.

Underworld was released on BBC Video in March 2002. It was released on DVD as part of the *Myths and Legends* box set



in March 2010. The special features for *Underworld* were:

► **Commentary** with actors Tom Baker and Louise Jameson and co-writer Bob Baker

► **Into the Unknown: The Making of Underworld** –

a look at the complex production of this story, with particular emphasis on the reasons for, and difficulties in achieving, the bluescreen virtual studio sets. With script editor Anthony Read, writers Bob Baker and Dave Martin, actors Jonathan Newth and Norman Tipton, designer Dick Coles and video effects designer AJ 'Mitch' Mitchell, with rare convention footage of producer Graham Williams

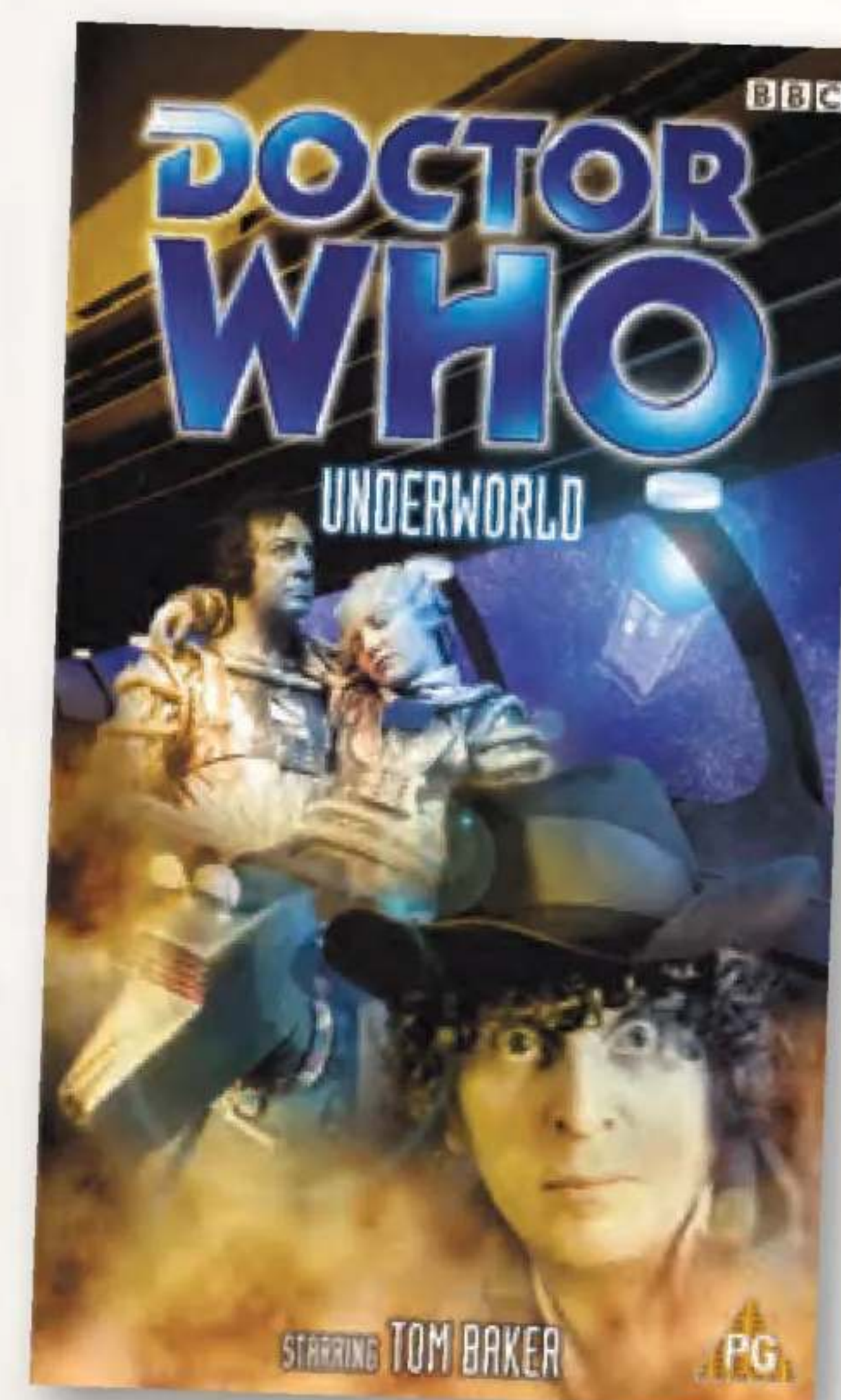
► **Underworld: In Studio** – using timecoded

Shibaden and U-matic video recordings, we are given a rare glimpse inside the studio during the recording of this story

► **Photo gallery**

► **Radio Times listings** in Adobe PDF format

► **Subtitle production notes**



Cast and credits

CAST

Tom Baker	..... Doctor Who
	with
Louise Jameson	..... Leela
James Maxwell	..... Jackson
Alan Lake	..... Herrick
Jonathan Newth	..... Orfe
Imogen Bickford-Smith	..... Tala
James Marcus	..... Rask [2-4]
Godfrey James	..... Tarn [2-4]
Jimmy Gardner	..... Idmon [2-4]
Norman Tipton	..... Idas [2-4]
Frank Jarvis	..... Ankh [3-4]
Richard Shaw	..... Lakh [3-4]
Jay Neill	..... Guard Klimt [2]
Stacey Tendeter	..... Naia [3-4]
John Leeson	..... Voice of K9
Christine Pollon	..... Voice of the Oracle [3-4]



UNCREDITED

Unknown Trog Slaves/Guards
----------------	--------------------------

Above:
The Oracle stages an execution.

CREDITS

Written by Bob Baker and Dave Martin
Incidental Music by Dudley Simpson
Special Sound: Dick Mills
Production Assistant: Mike Cager
Production Unit Manager: John Nathan-Turner
Lighting: Mike Jefferies
Sound: Richard Chubb
Visual Effects Designer: Richard Conway
Electronic Effects: A.J Mitchell
Costume Designer: Rupert Jarvis
Make-up Artist: Cecile Hay-Arthur
Script Editor: Anthony Read
Designer: Dick Coles
Producer: Graham Williams
Directed by Norman Stewart
BBC © 1977

Left:
Jackson's Quest finally nears its end.

Profile

ANTHONY READ

Script Editor

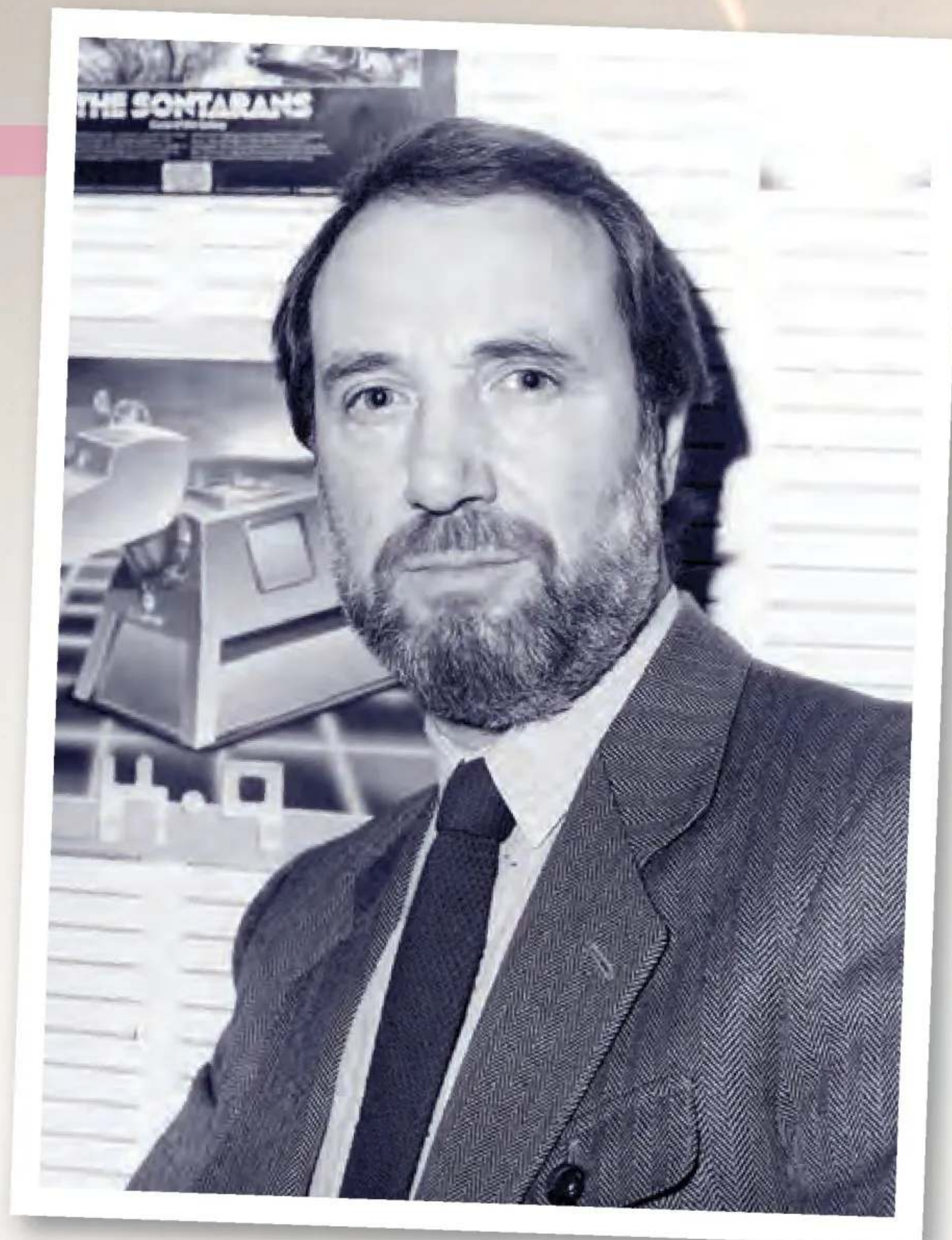
Read was born 21 April 1935 in the Staffordshire mining village of Cheslyn Hay, where his mother's family ran the local pub. Lottie Pratt, a dressmaker, had married miner Frederick Read in 1932 but tragically Tony's father died in a mining accident aged 35, when Tony was just seven. Lottie married Jack Bradford in 1947.

Read had wanted to write since the age of six, and after excelling at Queen Mary's Grammar School, Walsall, he studied acting at London's Central School of Speech and Drama from 1952. Befriending fellow student Ian Hendry, they formed the Theatre Unlimited company.

Staging touring productions, Read took ticket money and appeared on stage on the same nights. He produced an abridged *Romeo and Juliet* in which he played Tybalt.

Below:

Anthony Read produced *The Troubleshooters* from 1969.



On graduating, Read worked as an advertising copywriter before National Service took him to an army office overlooking Salisbury Plain and Stonehenge. On demob he returned to Walsall where he met Rosemary Kirby whom he married in 1958.

Working in publicity at publishers Newman Neame, he transferred to London in 1959. He then worked for publishers Jonathan Cape, while attempting to write for television.

Old pal Ian Hendry promised to pass on Read's script for Hendry's TV show *Police Surgeon* (1960) but the series was cancelled. For Hendry's next vehicle *The Avengers*, which began in 1961, Read got down to the final three for the story editor's post.

In late 1963 Read was interviewed by Sydney Newman for a scriptwriter/adaptor contract at the BBC, on the day *Doctor Who's* first episode was being recorded.

Having written for *Detective* (1964), Read was soon script-editing the crime compendium, followed by *Kipling* (1964) and *Sherlock Holmes* (1965). Writing and script-editing ailing oil saga *Mogul* (1965), he successfully reworked it as *The*

Troubleshooters, becoming its associate producer in 1966 and producer in 1969-72.

He also produced the first series of *The Lotus Eaters* (1972), starring old friend Ian Hendry, and Sunday serial *The Dragon's Opponent* (1973) before deciding, as he later told interviewer Toby Hadoke, "The suits had moved in and the fun had moved out."

Returning to freelance writing on *Marked Personal* (1974), *Sutherland's Law* (1974), *The Black Arrow* (1974/5), *Crown Court* (1975), *Quiller* (1975), *Z Cars* (1976/7), *Cicero* (1977), *The Standard* (1978) and *The Professionals* (four episodes, 1977-80), Read also wrote single drama *Kipper* (1977) and two further plays eventually credited to BBC in-house pseudonym David Agnew; *Hell's Angel* (1971) and *Diane* (1975).

Head of drama serials Graeme McDonald hoped to tempt Read back to the BBC in 1977 as a script editor. Not interested in a demotion, Read relented when McDonald mentioned *Doctor Who*. "Ah, well now," said Read, "that's different."

Trailing predecessor Robert Holmes from summer 1977, Read carried out uncredited work on *Image of the Fendahl* and *The Sun Makers* [both 1977 – see Volume 27] before becoming script editor with *Underworld*.

Read and producer Graham Williams hastily wrote *The Invasion of Time* [1978 – see page 40] as 'David Agnew' and developed the Key to Time quest that linked the 1978/9 series. Read saw potential in untried writer Douglas Adams, helping rework Adams' imaginative scripts for *The Pirate Planet* [1978 – see Volume 29]. Adams replaced Read as script editor in late 1978.

After leaving *Doctor Who* Read wrote *The Horns of Nimon* [1979/80 – see Volume 31] though was disappointed with its jokey treatment. Having departed to write a history book on 1943's Tehran Conference, this went uncompleted when Read's source in military intelligence was assassinated.



Soon Read was script-editing another fantasy series, *Hammer House of Horror* (1980). Freelance fantasy TV credits came on *The Omega Factor* (1979), *Sapphire and Steel* (1981), *Into the Labyrinth* (1981), an adaptation of John Wyndham's *Chocky* (1984) and two original sequels, *Chocky's Children* (1985) and *Chocky's Challenge* (1986). Earthbound fare included zoo drama *One by One* (1984/5) and junior Sherlock Holmes serial *The Baker Street Boys* (1983). Read published six *Baker Street Boys* novels from 2005-9 and a seventh in 2012.

He collaborated with *Doctor Who* writer David Fisher on a series of non-fiction books chronicling aspects of WWII, beginning with *Operation Lucy* (1982), through to *Berlin Rising* (1994).

Later TV credits included *The Chief* (1995), *Heartbeat* (1998) and New Zealand-made series *A Twist in the Tale* (1999) and *The Tribe* (1999-2002).

He was chair of the Writers' Guild of Great Britain from 1981/2.

He had two daughters; Emma Read runs factual TV production company Emporium.

Read resided in Taplow, Maidenhead in later years but died of cancer on 21 November 2015, aged 80. ■

Above:

Anthony Read wrote *The Horns of Nimon* for the 1979/80 series of *Doctor Who*.



THE INVASION OF TIME

► STORY 97

The Doctor allies himself with the Vardans and paves the way for an invasion of the Time Lord homeworld, Gallifrey. Leela joins forces with the Outsiders to repel the invaders, but the Vardans are only the puppets of a far greater threat – the Sontarans!



'AN ENEMY WITH AN ACHILLES HEEL
IS A MORE INTERESTING PROPOSITION
THAN AN ALL-POWERFUL THREAT.'

Introduction

Long before the Daleks laid siege to Gallifrey in *The Day of the Doctor* [2013 – see Volume 75], there was a coalition that almost succeeded in invading the Doctor's home planet.

Initially, it appeared that an elusive race of creatures called the Vardans had formulated a plan to land troops on Gallifrey. The Doctor, however, was just leading them on until they revealed themselves. Once they did, he was able to trap their planet in a time loop – a technique he'd previously used to defeat Axos in *The Claws of Axos* [1971 – see Volume 16]. The Vardans' plan, however, had actually been to find a way through the forcefield that protected Gallifrey, so that the Sontarans could invade.

You might think that the Sontarans – mighty warrior race that they are – were a worthy opponent for the Time Lords to face. In truth, however, despite their bluster, the Sontarans aren't the sharpest alien race. Their militaristic fervour blinds them to all else, and they're usually quite easily outwitted if not outgunned. An enemy with such an Achilles heel, however, is a more interesting proposition than an all-powerful threat. During this period, they were used sparingly, giving them a greater impact. Despite appearing in two of Tom Baker's stories, they only play a significant part in three episodes. In a bid to bolster their status, the Sontarans are all about a dramatic entrance: turning up at the end of Part One of *The Sontaran Experiment* [1975 – see Volume 22] and Part Four of *The Invasion of Time*.

During Tom Baker's run, the number of six-part stories had been reduced. To help sustain interest over a period of six weeks, *The Invasion of Time* used this two-pronged attack to effectively split the story into four parts (revolving around the Vardan attack) followed by two more (defeating the Sontarans). A similar approach was used in *The Seeds of Doom* [1976 – see Volume 25] which follows two episodes of antics in the Antarctic, with four that centre on the mansion of Harrison Chase back in the UK.

Six-part stories were phased out entirely in the 1980s, with only *The Two Doctors* [1985 – see Volume 41] being of a similar length. From time to time, however, *Doctor Who* still favours an epic conclusion to a series. The 2015 series featured a continuing narrative through its final three episodes. And like *The Invasion of Time*, *Hell Bent* chose Gallifrey as a suitably grand final destination for that year's run. ■

Below:
The Sontarans returned in *The Two Doctors*.



PART ONE

Avast spaceship powers through the interstellar void. Inside, the Doctor informs three aliens that he is prepared. [1] The Doctor signs a contract guaranteeing him complete control over the Time Lords, then returns to the TARDIS. Leela goes for a swim in the TARDIS swimming pool.

On Gallifrey, Commander Andred reports to Castellan Kelner that he has detected an unidentified capsule approaching. [2]

The TARDIS lands in the Panopticon hall. The Doctor emerges and goes off with Andred, ordering Leela to stay put.

The Doctor walks into Chancellor Borusa's office. The Doctor claims his legal right to the presidency of the Council of Time Lords. [3] Borusa agrees to speak to the Cardinals, but the Doctor insists that he is the only legal candidate and the induction must take place at once.

The Doctor summons Kelner and tells him he wants the President's quarters refurbished in the style of twentieth-century Earth. [4] He also wants Leela given quarters and suitable clothes for his induction. After Kelner has gone, the Doctor tells Borusa he wants his new quarters surrounded with panels of Earth zero-seven-three period.

Andred tries to find Leela some suitable clothing but all she wants is weapons. The Doctor is prepared for his induction, when he will be mentally linked to the Matrix, the Time Lords' store of information.

Leela asks if there are any rites she must observe. "If you could avoid killing anyone, it would help," Andred replies. [5]

Gold Usher convenes the members of the Supreme Council in the Panopticon for the Doctor's induction. The Doctor is invested as President and given the Sash of Rassilon and the Rod of Rassilon, and told to seek the Great Key of Rassilon. The Doctor is linked to the Matrix – and collapses in pain. [6]





PART TWO

The Surgeon General examines the Doctor and states that he has retreated into a cataleptic state. He is taken to the Chancellor's quarters.

The Doctor recovers from his mental shock. Seeing Leela, he tells Borusa to banish her from the citadel. Leela pushes Andred and another guard out of the way and escapes into the citadel. [1]

Kelner and Andred leave the Chancellor's quarters. Borusa demands to know what he is playing at. The Doctor tells him that while Leela remains free, they are all in danger. [2]

After Borusa has gone, the Doctor locates a secret door that even the sonic screwdriver won't open. [3] The Doctor realises it has a voiceprint and it opens. He heads to the Panopticon, followed by Leela. He enters the TARDIS, locking the door behind him. Leela hides as Andred and his guards enter.

The Doctor consults with K9; if K9 destroys the control centre, their allies' invasion is almost guaranteed to succeed.

Leela hides in space traffic control, where she meets a woman called Rodan. Rodan monitors an approaching space fleet. [4] They are quite safe; nothing can get past the transduction barrier.

The Doctor emerges from the TARDIS and asks Andred if he has caught Leela.

After they have gone, a guard unlocks the TARDIS - K9 emerges and stuns him.

The Doctor returns to Borusa's quarters and pretends to be woken up as Kelner and Borusa walk in. The Doctor demands that Borusa calls a council meeting. [5]

Rodan allows Leela into her area of space traffic control. The alien spacecraft draws even closer.

K9 destroys the transduction barrier control centre. Rodan announces that the barrier has failed. In the Panopticon, the Doctor introduces the Time Lords council to their new masters, three indistinct shimmering shapes. [6]

PART THREE

A guard attempts to shoot one of the aliens, but it reflects the blast back at him. “Resistance is useless!” says the Doctor. The leader of the Vardans congratulates him. Now all he has to do is find the Great Key. [1]

Leela decides that if the Doctor wants her banished, she should be banished. She invites Rodan to come with her.

The Doctor meets Borusa in the President’s quarters, decorated in pure lead. Which means they can now talk; the Vardans can read thoughts but can’t penetrate a lead-lined room. The Doctor has been shielding his thoughts using humour and imagination and has banished Leela for her own protection. [2]

Leela and Rodan enter the ‘barbarian garden’ of Outer Gallifrey. They are captured by bandits. [3]

Kelner instructs a guard to serve as the Doctor’s personal bodyguard and

to report to him everything that the President does. [4]

The bandits take Leela and Rodan to their camp, led by a man called Nesbin.

The Doctor meets Kelner and the Vardans in the Castellan’s office. He orders the guards to take Borusa in his quarters and hold him there. The Doctor asks Kelner to make a list of which Time Lords he thinks are troublemakers.

Kelner brings the Doctor his list. The Vardans want all the unreliable Time Lords to be destroyed but the Doctor suggests banishing them. The Vardans are still not ready to materialise fully; first the Doctor must dismantle the forcefield around Gallifrey. [5]

Leela tells the bandits that Gallifrey has been invaded and asks for their help.

Andred plots with two Time Lords to assassinate the President.

The Doctor returns to the TARDIS and links K9 to the Matrix. Andred shoots the bodyguard and enters the TARDIS. He levels his gun at the Doctor... [6]





PART FOUR

K9 stuns Andred.

Outside, Andred's fellow guards are killed by Kelner's guards. The Doctor emerges and condemns them for letting Andred escape. He then returns inside the TARDIS to tell Andred his revolution has failed. He explains that in the TARDIS, the Vardans can't read his thoughts, and that he is trying to identify their planet of origin so he can place it in a time loop. [1]

Leela prepares the bandits to attack. There aren't enough of them to capture the citadel, so Leela proposes they just try to rescue the Doctor. [2]

K9 confirms the only way to identify the Vardans' planet of origin will be if they materialise fully. The Doctor must dismantle the forcefield around Gallifrey.

The Doctor emerges from the TARDIS. The Vardans remind him they are monitoring his every thought. He goes

to the control centre and makes a hole in the forcefield above the citadel.

In the Panopticon hall, the Vardans materialise fully. They are humanoids in military uniforms. [3]

Leela tells Nesbin to create a diversion while she enters the citadel from the other side with Rodan and a bandit, Jasko.

K9 and Andred are joined by the Doctor at the President's quarters. He locks the door, insulating himself from the Vardans. They realise he has betrayed them and place Kelner in charge. [4]

The Vardans order two guards to break into the President's quarters, but the guards are killed by the bandits. The Doctor lets the bandits into his quarters as K9 finds the coordinates of the Vardan planet. He activates a modulation rejection pattern and the Vardans are sent back to their own planet. [5]

The Doctor returns to the Panopticon hall. As he is assuring everyone that Gallifrey is safe, four short, brutish figures materialise behind him. Sontarans! [6]

PART FIVE

The Sontarans' leader steps forward. He is Commander Stor of the Sontaran Special Space Service. He explains that the Vardans were merely a diversion to open the forcefield.

Borusa activates the citadel's celebration chimes at 50 times their normal volume, causing the Sontarans to clutch their helmets in pain and enabling the Doctor, Leela, Andred, Rodan and the bandits to escape. [1]

The Doctor, Leela, Andred, Rodan, Jasko and Ablif run into the President's quarters – only for Borusa to level a gun at the Doctor. [2] The Sontarans start hammering at the door, but Borusa explains that he had the foresight to have it reinforced with a titanium-based alloy. The Doctor vouches for his friends and Borusa lowers his weapon.

They use the secret door to enter the Chancellor's quarters. The Doctor tells

Leela to take everyone to the TARDIS while he stays with Borusa.

Stor, the Sontarans and Kelner enter the President's office to find it empty.

Leela's group is attacked by Sontarans – Jasko and Ablif are killed in the battle. [3]

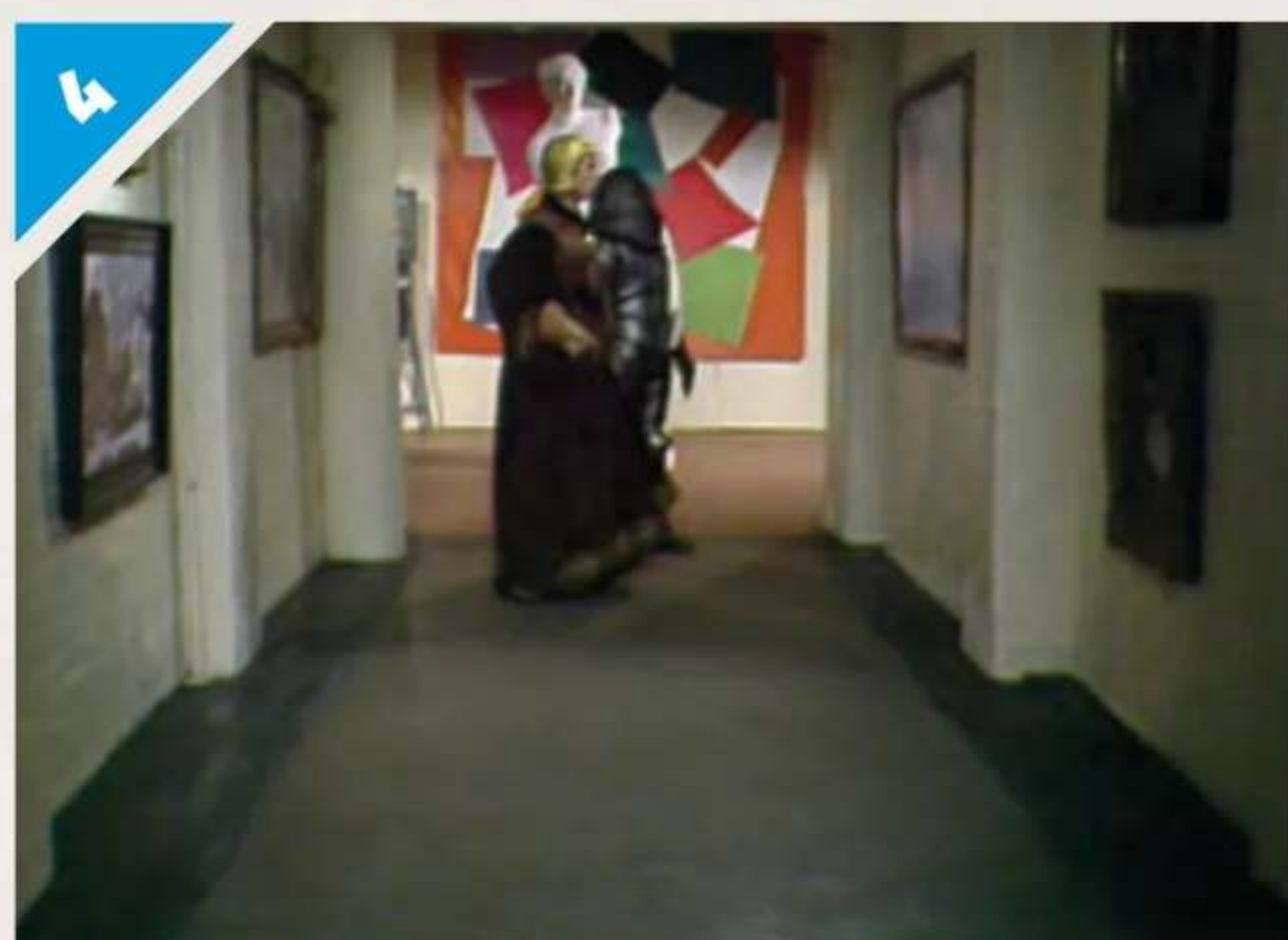
Borusa gives the Doctor the Great Key. He is the first President since Rassilon to hold it. [4]

Leela, K9, Andred and Rodan reach the Panopticon and take sanctuary in the TARDIS. The Doctor and Borusa reach the TARDIS. Inside, he gives Leela the Great Key and tells her to take Borusa to the 'VIP suite'.

Stor tells Kelner that unless the hole is widened for the battle fleet, he will kill him. Kelner says the control circuits have been bypassed through the Doctor's time capsule. But he has an idea. [5]

The Doctor and Rodan raise Gallifrey's defence screens. As long as the TARDIS remains secure, Gallifrey is safe. But Kelner tries to throw the TARDIS into a black star! [6]





PART SIX

The Doctor throws the TARDIS fail-safe, immobilising it.

The Doctor, Rodan and Leela head deeper into the TARDIS, barricading the interior door. Moments later, Stor, Kelner and a Sontaran trooper break in. [1]

The Doctor, Leela and Rodan go down through the TARDIS's many storerooms. [2] Eventually they reach the workshop where the Doctor takes the Great Key from Leela and places Rodan in hypnosis, telling her to do whatever K9 tells her.

Stor detects a biological barrier which is stopping them track human life forms. Kelner suggests they go to the ancillary generator and cut off the barrier's power.

The Doctor, Leela and Andred find Borusa in the swimming pool room.

Kelner leads Stor and his trooper through the TARDIS. They end up in the swimming pool where Andred fends off the trooper by throwing a chair at him. [3]

Stor, his trooper and Kelner finally find the ancillary power station, disguised as an art gallery. [4] Kelner deactivates the biological barrier so the Sontarans can now locate the humanoids.

The Doctor and his friends return to the workshop where Rodan has constructed a large weapon under K9's guidance. It is a De-mat Gun, armed with the Great Key. The Sontaran trooper bursts in – and the Doctor dematerialises him with the De-mat Gun. Kelner tells them Stor is in the Panopticon.

The Doctor confronts Stor in the Panopticon. [5] Stor detonates a grenade powerful enough to destroy them all just as the Doctor fires the De-mat Gun. The Doctor is knocked unconscious.

He recovers, and returns to the TARDIS workshop, forgetting about his induction, the Vardans and the Sontarans' invasion.

Leela tells the Doctor she wishes to stay – with Andred. [6] K9 also wishes to stay, so the Doctor departs alone. He sets to work building a K9 Mark II!

Pre-production

To conclude his first series as producer, Graham Williams wanted a six-part story exploring more of the philosophies and society of the Time Lords as seen in *The Deadly Assassin* [1976 – see Volume 26] the previous year, particularly with reference to life outside the Capitol, the city in which the Time Lords lived. This narrative would feature various elements established in *The Deadly Assassin*, including the character of Borusa – then a cardinal and now the chancellor – who featured with the agreement of former script editor Robert Holmes who had written the scripts. And with high levels of inflation, it would also be cheap since

many of the costumes and set elements used in 1976 were still available.

For this slot, newly arrived script editor Anthony Read wanted to bring some fresh blood into the *Doctor Who* writers pool and considered various names with whom he had worked previously. He opted to give the job of closing the 1977/8 series to writer David Weir, who – born in London in 1934 – described himself as a “pure Celt”. Read had worked closely with Weir during his time as producer of the 1960s BBC drama series *The Troubleshooters*, to which Weir had contributed 17 episodes; the pair had also worked together on Read’s subsequent series *The Lotus Eaters*. Although the writer’s work had been mainly in the thriller/espionage field



'THE NARRATIVE WOULD
FEATURE VARIOUS ELEMENTS
ESTABLISHED IN THE
DEADLY ASSASSIN.'

(including *Danger Man*, *Riviera Police*, *Intrigue*, *The Man in Room 17*, *The Gold Robbers*, *Brett and Quiller*) or boardroom drama such as *The Plane Makers*, he had also contributed two scripts to ATV's expensive film series *Space: 1999* and before that scripted the science-fiction satire *The Devil's Eggshell* for BBC1's *Play of the Month*. However, his most recent work had been to script English versions of the Nippon Television series *Suikoden* which aired on BBC2 from September 1976 as *The Water Margin*.

Since Read wanted to study the philosophical and moral aspects of life, a theme he had used throughout *The Troubleshooters*, he felt that Weir would be an excellent choice. Weir was

commissioned on Monday 18 July 1977 to write a six-part Gallifrey story under the title *Killers of the Dark*, with a tight target delivery deadline of Monday 15 August. A concept that Williams was keen to explore was that not everyone who lives on Gallifrey is a Time Lord. With this in mind, Read and Weir developed the idea that there would be a second tier of Gallifreyan society, comprised of drop-outs. They decided that these Gallifreyans would be a race of cat people. Some years later, Graham Williams also referred to the serial as *The Killer Cats of Ginseng*.

Given only four weeks to write the scripts, Weir delivered Parts One to Five to Read on the contracted deadline of Monday 15 August. Unfortunately, it



Above:
The Doctor
makes a deal.

quickly became clear that there were going to be problems with *Killers of the Dark*. The scripts deviated dramatically from the previously agreed storyline, and also contained certain elements that would be difficult for the production team to realise on their limited budget. One of the more impossible scenes in the script was an amphitheatre the size of Wembley Stadium filled with an audience of killer cats, a race whose technical advancements lay alongside the barbarism of gladiatorial pastimes. There was also felt to be far too much material in the story that would need to be filmed on location.

As time was already quite tight for

Connections: Mr President

▶ To delay his execution in *The Deadly Assassin* [1976 – see Volume 26], the Doctor takes advantage of a legal loophole and puts himself forward as a candidate for the Time Lord presidency. With his opponent killed, the Doctor becomes the default President Elect. He returns to Gallifrey in *The Invasion of Time* to take up the post.



pre-production on the serial, preparatory work was already being carried out while the scripts were being written. Costume designer Dee Kelly had made sketches for her visions of Gallifreyan cat people and locations had also been found for the wilderness of Outer Gallifrey at Laporte Industries Limited at Beachfields Quarry, Redhill in Surrey; this had previously been used for filming on *Frontier in Space* [1973 – see Volume 19] and *Planet of the Daleks* [1973 – see Volume 20].

The director assigned to the serial from the start of September was Gerald Blake, with whom Williams had worked on *Z Cars*. Blake had previously directed *The Abominable Snowmen* [1967 – see Volume 11]. Since then he had worked on other BBC series such as *The Newcomers*, *Quiller* and *The Expert* as well as episodes of the science-fiction series *Out of the Unknown* and *Survivors*. Blake and Read had also worked together previously; Blake had directed the 1973 BBC2 period serial *The Dragon's Opponent* which Read had produced, and had also directed one of Read's *Z Cars* scripts earlier in the year.

When he read the newly delivered scripts, Read was aghast that they were almost totally unusable, and was disappointed that a colleague he had worked with for so long could let him down so badly. Although Weir's story worked as a standalone drama it was far too technically demanding for *Doctor Who* and it was clear that he did not really understand the show. Blake also agreed and declared that the *Killers of the Dark* was impractical.

Industrial action

Filming was due to begin on *Killers of the Dark* in the third week of October. Any replacement story would have to be written very quickly in order to give the various servicing departments, such as costume and design, enough time for the necessary preparatory work. However, an additional concern raised its head when it became clear that the BBC was heading for a period of industrial action that could potentially disrupt the making of the serial. The dispute had hit in the autumn of 1977, and consequently the six-part serial would only be allocated the first of its three studio recording sessions

at Television Centre – as studio time was needed on programmes specifically for the Christmas period.

There was however provision in a strike fund to gain technical facilities for a strike-struck programme to be completed outside the studios, so any new story would have to be geared around locales that could be found or realised beyond Television Centre.

With the script problems and the strike action in mind, Williams' superiors told him that the story could be dropped, and the money given to the following series. However, Williams decided to fight on with a story that he wanted to do.

Williams and Read were keen for their new story still to be set on Gallifrey, not least of all because this would allow the use of existing props and costumes. However, they would have to be careful not to employ any of the concepts and characters created by Weir. Read was reluctant to commission himself for the scripts, and approached his predecessor Robert Holmes who had experience of writing six-part serials to tight deadlines, as demonstrated the

previous year with *The Talons of Weng-Chiang* [1977 – see Volume 26]. However, having only left the production office in July, Holmes was reluctant to return to the programme so soon and was busy on the initial scripts for a biographical drama entitled *Northcliffe* (latterly *The Chief*) for producer Louis Marks.

By Thursday 25 August it had been decided that Read would write the replacement serial based on a storyline devised by himself and Williams, developed from ideas that Williams had been contemplating for some time. Formal justification for Read's internal script was requested on Tuesday 6 September, with Williams citing 'urgent script substitution requires intimate knowledge of programme requirements and production facilities'.

Bolstered by some stiff drinks in the BBC bar, Read and Williams took a long weekend, and roughed out a replacement storyline based on the Gallifrey seen in *The Deadly Assassin*. The writers telephoned Robert Holmes for advice. The experienced writer reminded them that he had

Below:

Leela leaps to the Doctor's aid.



Connections: QED

► “QED” says the Doctor to himself in the chancellor’s office while looking for a key to the secret door. ‘Quod erat demonstrandum’ is Latin for ‘what was to be demonstrated’, or ‘thus it was demonstrated’, and is commonly used in mathematics and

philosophy to mark the completion of a proof.



always structured a six-part serial as a four-part story and a two-part story, often with different settings and characters (eg *The Seeds of Doom* [1976 – see Volume 25], where Parts One and Two were set in the Antarctic and the remainder were set in England). Williams had been planning to explore more of the interior of the TARDIS in a story for the following series, but necessity persuaded him to utilise the idea for his and Read’s replacement story.

There was also the matter of adversaries for the story to replace David Weir’s cat people. Since no old monsters had yet been used in the season, Williams opted for the return of one of his personal favourites, the Sontarans, who he felt would pose a good threat; Read was also familiar with the creatures and agreed that they were useful. Holmes agreed to the use of his creations to get the team out of a tight spot, although he was never comfortable with other writers’ use of these aliens. Bearing in mind Holmes’ other comments about story structure, Williams decided to hold them back for the final two instalments.

On Thursday 25 August, Williams circulated the story outline for *The Invasion of Time* (also referred to on occasion as *The Invaders of Time*), commenting that it was ‘of necessity the basis only of the six-parter’ and that ‘the Interior Tardis and certain sections of the Interior Citadel are already established and will be recorded in the studio’ while ‘the greatest possible use of interior locations has been made to combat the vagaries of weather during November and December’. Part



One effectively covered the narrative of the first two episodes, with the Doctor in conference with the alien Vardans (‘at this point in the form of an electric shimmer’) on the flagship of the Vardan battle fleet and then opening a route to the citadel of the Time Lords by travelling to Gallifrey and assuming his legal right to the Presidency of the High Council. The Doctor went through his ‘ceremony of installation’ and received the ‘regalia of the President as established in previous adventures’ as well as being linked to the APC Net. The Time Lords celebrated with much enthusiasm and then the Doctor banished Leela to ‘the outer world of Gallifrey’ before having K9 destroy the defences. The cliffhanger was set in the throne room where members of the council saw the shimmering form of the Vardans appear and the Doctor told them to greet their new masters. In Part Two, Leela was out among the Gallifreyan inhabitants: ‘Gallifrey is an earth-normal



with his bodyguard, but in the cliffhanger was captured by several Time Lords who threatened to execute him. (Williams noted that the battle and chase in the citadel would be done on OB and film, while scenes outside the citadel would be shot on film). In Part Three, K9 helped the Doctor escape, and Leela managed to persuade the Gallifreyan rebels that they were on the same side and must attack the citadel. The Doctor linked himself to the APC Net and used it to defeat the rebellion in the citadel, allowing the Vardans to materialise fully. The cliffhanger was that the Vardans told the Doctor his stratagem had failed; 'they are now in control and their first act will be to execute these troublesome Time Lords, starting with the Doctor.'

Left:
Kelner
throws his lot
in with the
Sontarans.

planet aided by Time Lord technology, the weather is controlled, the population is fed and clothed synthetically and exist in an Arcadian Paradise.' Leela could not understand the gentleness and tranquillity of the natives until it was explained to her that ages ago the Time Lords offered the Gallifreyans this degree of comfort and peace in exchange for the right to build their citadel on this planet. (The citadel could sometimes be seen in background through the use of model shots.) Later outside the citadel, 'the weather has turned foul (we are shooting in November and December!) and the food and clothes dispensers have ceased to function.' Back in the throne room, the Doctor sent the more able Time Lords off on quests through time and space, leaving only those who oppose the Vardans. Outside, Leela was threatened as she was a friend of the Time Lords and she was forced to flee. As dissent in the citadel grew, war broke out between the Time Lords. The Doctor fled

The Vardans

Part Four opened with K9 – who was linked into the APC Net – again saving the Doctor, who made a dash for the TARDIS. Leela was held prisoner in the dungeons with some rebel Time Lords and rebel Gallifreyans. In the TARDIS, the Doctor and K9 wondered why their plan – to get the Vardans to materialise, identify their home world and time loop it – did not work. The APC Net had encountered the Vardans in its probings, and the aliens had seized control of its central control mechanisms in the President's regalia. The Doctor pretended to play along, knowing if he did not the Vardans would soon find a more malleable Time Lord and force them to co-operate. Using a captured Time Lord, the Vardans

Connections: Open sesame!

▶ Attempting to open the secret door in the chancellor's office, the Doctor tries the phrase, "Open sesame." This has its origins in the classic story *Ali Baba and the Forty Thieves* from *One Thousand and One Nights*, in which the magical phrase is used to open the entrance to a cave that contains a fantastic treasure trove.





Above:
The resistance
assembles.

started to manipulate the APC Net, but the Doctor and K9 found the solution, expelling the Vardans: 'In the Throne Room the Doctor and other Time Lords are jubilant at their success until two Sontarans appear saying it's a little early for celebration.' In Part Five, the Doctor and his friends fled to the safety of the TARDIS, but the Sontarans – using knowledge gained from the Vardans and captured Time Lords – gained entry to the ship: 'The Doctor is driven from the Tardis Control Room and the remainder of this and the next episode takes place almost entirely inside the Tardis, which after all has not been investigated on the screen and is thus available to us.' The cliffhanger was when the Sontarans started to dematerialise the Interior of the TARDIS. In Part Six, the Doctor stopped this process by throwing the TARDIS fail-safe and the Sontarans were forced to fight on 'the Doctor's chosen battlefield – the Interior of his own Tardis'.

The Sontarans needed to regain the President's regalia, while the Doctor must regain control of the TARDIS to repair the

APC Net. The Doctor and another Time Lord decided to do the unthinkable and build the Time Lords' 'ultimate weapon, a demat gun'. In the following battle, it was suggested that K9 might use the De-mat Gun to reject the Sontarans. The APC Net was repaired and the Doctor built into himself and the other Time Lords a neural relay that erased the knowledge of how to build a De-mat Gun; Leela remembered the weapon but could not build one. In the end, 'The Doctor resigns his presidency in order to enjoy the more enjoyable life of a maveric [sic] Time Lord.'

Working at speed from Williams' outline, and with the scripts for *The Deadly Assassin* to hand for reference, Read wrote the scripts for *The Invasion of Time* at home and sent scenes into the office each day, with a set of first drafts prepared within a fortnight by the start of September (although the officially documented dates of receipt were Friday 30 September for Parts One to Four and Thursday 6 October for Parts Five and Six). However, Read and Williams knew that there were still many problems with the hurried offering at

this stage. Williams then did preliminary script-editing on the scripts, spending almost a solid week at his home reworking and retyping Read's work and getting very little sleep! In the later episodes, Williams did more editing than he expected to, and rewrote most of the TARDIS material in the last two episodes. Consequently, Read agreed that he and Williams should share the rights to the script.

As late as Thursday 6 October, there was no writer credit on the scripts. Williams and Read could not be credited for their work, since the Writers' Guild in particular would take a dim view of both a producer and a script editor collaborating to do a writer out of a job – and this would have been embarrassing for Read in particular who was heavily involved with the Guild. The duo decided to credit their scripts to the name 'Richard Thomas', after Williams' two-year-old son. However, Graeme McDonald, the head of department, insisted that the BBC Drama in-house name of 'David Agnew' should be attributed to the serial. The name had been used on other BBC shows. *Hell's Angel*, a 1971 edition of BBC1's *Play for Today* produced

by McDonald, had carried the name when writer Hugo Charteris had been unhappy with changes made by director Alan Cooke. Director Alan Clarke's changes to Jonathan Hales' script *All the Saints* resulted in the pen-name being used on the BBC2 play *Diane* screened in July 1975. Within recent months, writers had removed their names from two editions of the BBC1 crime series *Target: Blow Out* (originally by Roger Marshall) and *Hunting Parties* (originally by Bob Baker and Dave Martin). The Writers' Guild was informed about the situation, and agreed that in this case a script written by producer and script editor was unavoidable. By Monday 10 October, the 'David Agnew' name had been assigned to the serial.

Connections: Jump to it!

▶ The Doctor plays hopscotch as he passes down one of the Capitol's corridors. This children's game dates back to the late seventeenth century where it was known as 'scotch-hop' or 'scotch-hoppers'.



Leela's departure

One very last minute aspect of the script was the departure of the Doctor's companion, Leela. Williams wanted the ending left open in the hope that he could persuade Louise Jameson to renew her contract as Leela. Jameson herself had announced during production of *Underworld* [1978 – see page 6] that 15 months on the series had been long enough; to remain any longer would risk reducing the chances of her finding other work. She was also unhappy with her working relationship with Tom Baker, and although later in their lives they would become great friends, Jameson was eager to escape her co-star at this time.

The options for Leela's departure were effectively death or marriage – the former being ruled out as too upsetting for younger viewers. Williams also felt that the

Left:

The future of Gallifrey is on a knife edge.



Connections: Locked down

► In *The Deadly Assassin* [1976 - see Volume 26] it is established that the Doctor's TARDIS has a 'trionic' lock. However, a spelling mistake in the script for *The Invasion of Time* lead to actor Chris Tranchell pronouncing it "trimonic". Despite being told the actual pronunciation, he was unable to say it correctly.



character of Leela had been developed as far as possible, and was now restricting the format.

With Leela leaving, the opportunity was also taken to revamp K9. There were a variety of modifications that the BBC effects team wanted to carry out on the remote-controlled dog, and it was decided that if K9 was left on Gallifrey with Leela, then K9 Mark II could join for the following series.

In the script for Part One, for the Vardan flagship, 'everything about it suggests

a monumental capacity to destroy - sleek, predatory killer shark of space' while the Vardan war room 'should reflect or emphasise the efficiency and deadly purpose of its designers' with a screen showing 'several hundred vessels which make up the fleet'. On signing the papers, the Doctor commented: "I've heard that one before. It almost got me killed once... oh, of course you know that." The Castellan's office was 'as futuristic a location as we can find, sparse chrome, glass, plastic. The sort of office the President of IBM might aspire to', with 'one small, but as will become clear, very effective command console, based on the sound principles of an electronic calculator together with the versatility of a computer [sic] terminal'. Kelner was described as 'a civil servant of whom Livia or Lorenzo would be justifiably proud. Catherine de Medici wouldn't give him house room - but then she was a bit particular'; in Part Three he entered 'with all the dignity of a wet newspaper' and was often referred to as biting his fingernails. When Andred sounded the alert, 'Kelner hands him a

marble. A cluster of seven marbles in the form of an atom structure is on his desk and it is one of these that he has selected and given to Andred. Andred takes it and crosses to his "telephone"... He holds the marble to the "telephone". A modulated hum starts.' Gomer was 'physically old but mentally very alert. The kindest thing to say about Savar is that he is just the opposite.' The inauguration was to feature 'all the Guards we can furnish'. Rassilon was spelt 'Rasillon' throughout the script.

In Part Two, Leela passed two Time Lords who were 'like ancient Oxbridge dons' and hid in a storeroom, and instead of the Doctor's comment to camera about the sonic screwdriver not helping, the scripted line was, "Chancellor, that's just not fair." Rather than use the Sash to show the Doctor's authority as in the final programme, the script noted: 'From his pocket he produces the Rod of Rasillon - depending on the depth of his pocket.' In the TARDIS, K9 told the Doctor, "Twenty-nine and 2/3% of the people you have ever met have called you smug, to my knowledge." Rodan was 'an attractive

Right:

Outsiders -
Presta and
Nesbin.





woman in an adaptation of Time Lord clothes' who was 'engrossed in a hand held game – the best version we can find of trying to get the ball bearings in their five separate holes. The game that sends even the most rational person round the twist.'

In Part Three, there was reference to 'Genus cameilia [sic] in dried form by Cardinal Merrydell Vol'. Outside the Citadel was 'a fairly bleak stretch of open country. On the horizon (glass shot) can be seen the distant helical towers of the Time Lords' citadel.' The Outsiders wore 'a sort of horrified, cut down version of Time Lord clothes' and lived in a clearing with 'a simple roof structure to provide shelter'. At the end of the episode, Andred said, "I sentence you to die in the name of liberty and honour."

In Part Four, the Vardans were revealed as 'humanoid figures. They are quite normal. Their dress is military in style, similar to battle fatigues. They carry no weapons but have pouches and accoutrements for communication and supplies.' At the end of the episode appeared 'Stor, a Sontaran Field Commander in full battle armour [who] stands with a lieutenant at his side in the doorway'.

In Part Five, the Sontarans referred to the Doctor as "Doktor", and when Borusa entered the President's Office, he 'looks at K9 and the décor with some distaste.' Questioned by Stor about the President, 'Kelner grovels. He was only going to say – "is the Doctor"... but Sontarans know best.' For the pursuit along the corridors, it was noted, 'The Sontaran is only half the Doctor's size and therefore takes twice as long.' When the Doctor told Leela that their party should head for his office, he explained: "I've some paperwork to finish." "Can't it wait?" asked Leela. "Not much longer," replied the Doctor. The Chancellor's office had 'a rather exaggerated version of a Feydeau hotel reception board' covered in keys, one of which was the Great Key. Seeing the Doctor in the corridors, 'The Sontaran, with as much reluctance as a barracuda, opens fire'; the Doctor was 'panting far harder than Borusa, who is only mildly out of breath'.

Borusa

In Part Six, the TARDIS walkway was envisaged as 'inside an (empty) gasometer? Anyway, a vast well with stairs and handrail down' while the conservatory was 'preferably the tropical house at Kew, or Shepherds Bush Green but...' When Rodan fell under the Doctor's influence, 'she is not by any means the usual hypnotized zombie' and was described as doing arc welding in the workshop. In the bathroom action sequence, 'The other Sontaran slips on a puddle. We can't afford the costume change, so he narrowly avoids going in.' On seeing 'a vine type plant' which 'waves its "tentacles"' in the conservatory, the Doctor said, "Oh, it's you again is it? Want to make yourself useful for a change?"

Left:

Leela enters the 'barbarian garden' of Outer Gallifrey.

at which the leaves moved. When the Sontaran became trapped in the plant, the Doctor was originally to remark, “Hello! *Quercus rubra* – I can see you two are getting on very well.” The script also called for a TARDIS power station: ‘This could be one area we’ve seen the Doctor and his Party pass through before – seems a pity to waste it on just one shot.’

Angus Mackay, who played Borusa in *The Deadly Assassin*, was not available to reprise the role, so it was necessary to recast the part, explaining that Borusa had regenerated. On Friday 30 September, Blake offered the role to Paul Daneman whom he had met at a party given by Jill Gascoigne; at this point, only the first four scripts were available and the fifth had just arrived. Daneman replied on Saturday 8 October to say that it would have been fun, but he had a ‘large iron in the fire.’ However, on Friday 7 October, Blake offered the role of Borusa to Derek Godfrey, whom he had met at the BBC

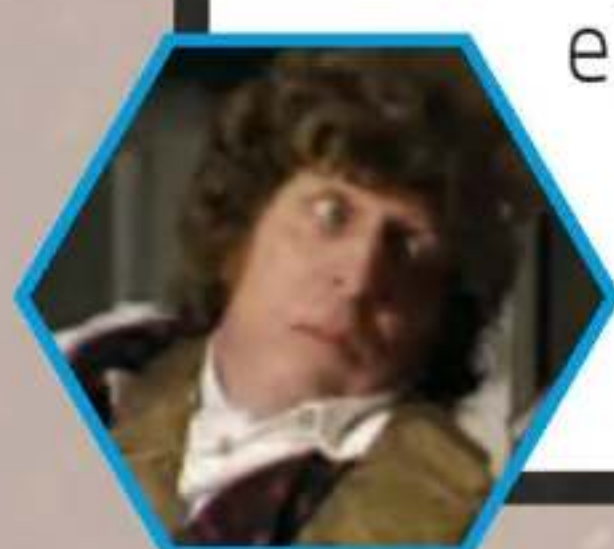
Club and knew from the BBC1 drama *Warship*, describing *Doctor Who* as a ‘fun’ time for all. However, Godfrey also turned the part down and the role ultimately went to John Arnatt.

On Tuesday 4 October, Graeme McDonald commented to Williams that he had enjoyed the script for Part Six but had noted a few ‘violent moments’. He also did not fully understand the plot of Part Four and felt that Part Six needed tightening.

The scripts for *The Invasion of Time* were distributed on Monday 10 October. The rescheduling of the serial meant that Roger

Connections: Seeing red

Attempting to destroy the transduction barriers around Gallifrey, the Doctor mentions the Doppler effect and ‘redshift’. The Doppler effect (named after physicist Christian Doppler) is the change in frequency or wavelength of a wave for an observer relative to its source. Redshift (and blueshift) are an example of the Doppler effect in electromagnetic waves such as light.



Murray-Leach, who had designed *The Deadly Assassin*, was no longer available as designer, having been specifically sought to give continuity with the previous adventure on Gallifrey. He was replaced by Barbara Gosnold on her first work on *Doctor Who*. Make-up was handled by Maureen Winslade, who had worked on *The Invisible Enemy* [1977 – see Volume 27] at the start of the current series. Dick Mills of the BBC Radiophonic Workshop was assigned to create special sounds for the serial in September.

The voice of K9

Rehearsals began at Room 503 of the BBC’s Acton Rehearsal Rooms on Wednesday 26 October 1977 and ran up to Saturday 5 November, the day before studio recording. Providing the voice of K9, John Leeson had been contracted on Wednesday 12 October; he had previously worked with Gerald Blake on a BBC2 adaptation of *The Spanish Farm* in 1968 and more recently on the BBC2



school drama *Headmaster*. Several of the cast had previous associations with *Doctor Who*. Chris Tranchell, cast as Andred, had appeared as Roger in *The Massacre of St Bartholomew's Eve* [1966 – see Volume 7] and as Jenkins in *The Faceless Ones* [1967 – see Volume 10]; he had also worked with Blake on episodes of *Z Cars*, *Out of the Unknown*, *The Onedin Line* and *Survivors*, and was an old friend of Tom Baker's. The grovelling Kelner was Milton Johns who had also played two previous roles in *Doctor Who*: Benik in *The Enemy of the World* [1967/8 – see Volume 11] and Guy Crayford in *The Android Invasion* [1975 – see Volume 24]; Blake had directed him in an episode of *The Expert* the previous year. Vardan Tom Kelly had played guards in *The Face of Evil* [1977 – see Volume 26] and *The Sun Makers* [1977 – see Volume 27]. Dennis Edwards had been a centurion in *The Romans* [1965 – see Volume 4] and was an old friend of Blake's from their acting days, appearing on television together in the 1950s after which Blake directed him in *The Newcomers*, *The Dragon's Opponent*

and *Z Cars*. Reginald Jessup was a servant in *The Massacre of St Bartholomew's Eve* (and had been directed by Blake in *Curtain of Fear* and *The Newcomers*), and Charles Morgan had been cast by Gerald Blake before as Songsten in *The Abominable Snowmen* since when they had worked together on numerous series including *The Spanish Farm* and *The Doctors*.

The cast also included two artistes with stunt experience. Max Faulkner (whom Blake had directed in *The Expert* the previous year) was given the role of Nesbin, leader of the Outsiders, while Stuart Fell was cast as a Sontaran trooper. Both had played a variety of parts in *Doctor Who* since starting out as stuntmen on the series in the early 1970s. The principal Sontaran, Commander Stor, was played by Derek Deadman since Kevin Lindsay, who had played all previous Sontarans, had sadly died of a heart condition some years earlier; Fulham-born Deadman had featured in the Thames sketch show *Billy Dainty, Esq.* Williams was unhappy with the voice and accent that Deadman used for his performance as Stor. However, despite Williams' repeated requests, Deadman stuck with his initial choice.

It was only during rehearsals that the ending with the De-mat Gun and the Doctor's amnesia was fully resolved. During one altercation with Baker, director Gerald Blake said, "Don't you speak to me like that! I can remember when you were Patrick Troughton." The director maintained an upbeat, party atmosphere on set, and was happy to let Tom Baker make suggestions which he would then choose whether to use or not. ■

Connections: A nice cuppa

▶ Borusa explains to the Doctor that "tea is camellia in dried form". It is actually genus *camellia sinensis* – an evergreen shrub native to Asia.



Left:

Gallifrey's Lord Chancellor and Lord President.

'THE SONTARAN UNIFORMS
WERE BASED CLOSELY
ON THE OUTFIT WORN
BY KEVIN LINDSAY
IN THE TIME WARRIOR.'



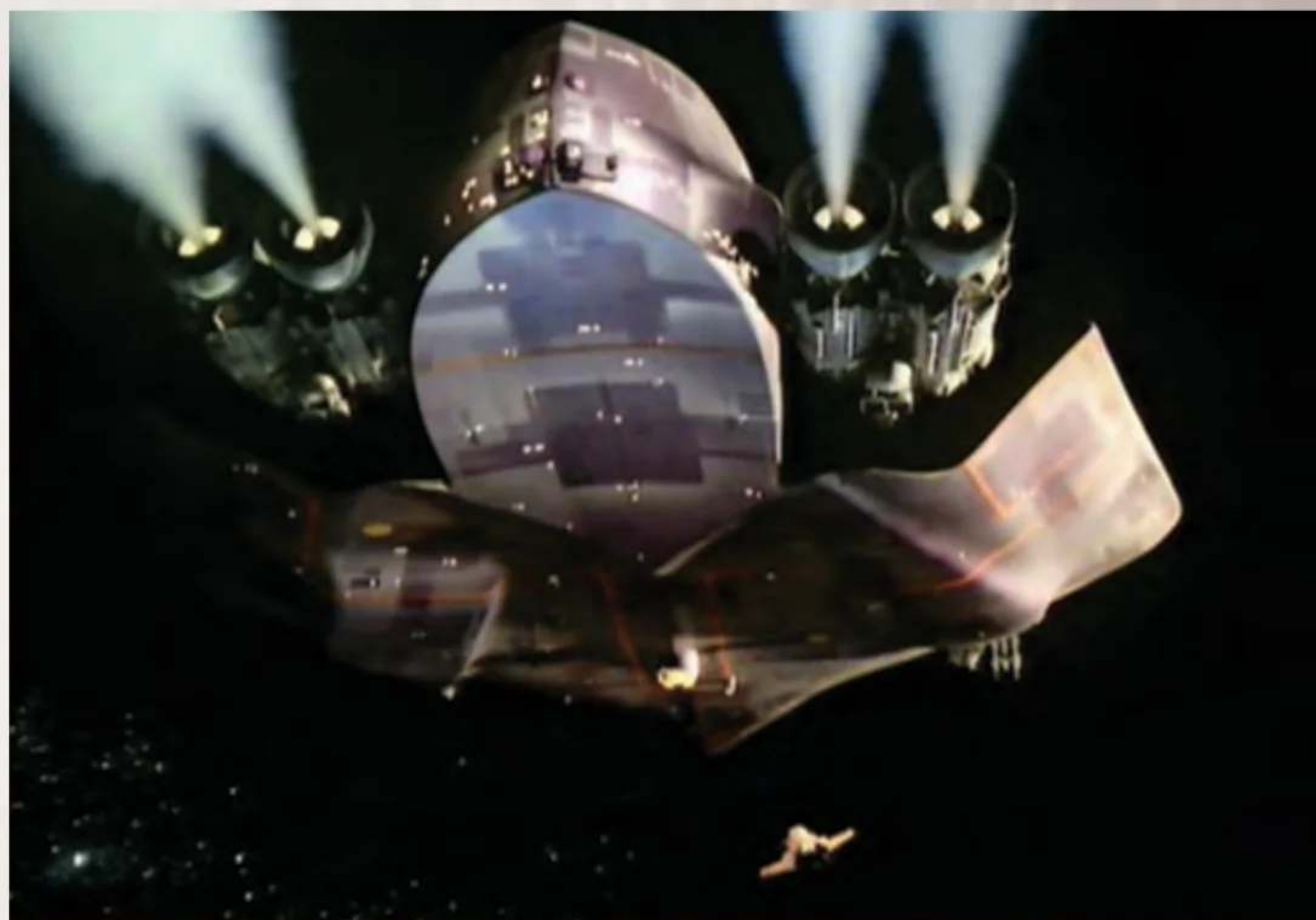
Production

While rehearsals for *The Invasion of Time* took place at Acton, all the model work for the serial was being shot on 35mm film at Bray Film

Studios over Tuesday 1 and Wednesday 2 November, unaffected by the industrial action. Because of the volume of effects work, the original designer Colin Mapson was assisted by Richard Conway who concentrated on the model sequences. Both had worked on various *Doctor Who* serials since *The Green Death* [1973 – see Volume 20]. The main model was the Vardan cruiser, a huge craft made from two Suzuki motorbike cowlings and built by freelancer Bill Pearson. The ‘exhaust’ smoke seen coming out of the spaceship models was actually the gas propellant for an airbrush. Graham Williams wanted the opening model shot to be impressive, emulating the start of *Star Wars*; a film he had viewed in advance of its UK première. Both this and a smaller craft were fitted with jet-burner engines, and appeared in Parts One, Two and Four. One shot of the battleship in orbit over the Capitol on Gallifrey was dropped from Part Four.

Out of character

Louise Jameson was unhappy with the scripts, and in particular felt that she was written out very badly. The idea that she should fall in love so rapidly with Andred seemed out of character to her, and the actress would have preferred to have been killed off. To add some authenticity to the serial,



Above:
The impressive opening model shot.

Jameson and Tranchell tried to develop a gentle closeness for the later OB material.

Right up to recording, Graham Williams attempted to get Louise Jameson to reconsider her decision to leave since the closing scenes could easily be rewritten to have Leela depart in the TARDIS with the Doctor. However, by now Jameson had been offered the chance to play roles in three stage productions by Richard Cottrell of the Bristol Old Vic: Beatie Bryant in *Roots* opening on Tuesday 14 February at the Little Theatre in Bristol’s Colston Hall, followed by Catherine in *A View from the Bridge* at the Royal and then Raina in *Arms and the Man*, all of which would keep her busy through to early May – clashing with the start of *Doctor Who*’s next recording in April. Consequently, Jameson again declined the offer.

However, the news broken by the *Daily Express* on Saturday 5 November was the front page announcement *I’ve had enough says TV’s Dr Who* in which Christopher Jones reported that the previous day Tom



Above: Leela is not impressed with Gallifrey.

Baker had commented: "I've had enough ... I think I've done my bit." The actor was apparently to devote himself to "serious" acting while a BBC spokesman indicated that "contracts for the 26-week series beginning next autumn have not been signed. But Tom's working relationship with us is very good." Baker then appeared on Radio 1's *Playground* magazine programme on Sunday 6 November.

The only studio recording session for the serial spanned Sunday 6 to Tuesday 8 November at TC6 at the BBC's Television Centre, although it had at one point been planned for TC8. This covered all the scenes set in the Panopticon, a Capitol chamber, the bridge of the Vardan ship, and the TARDIS control room and adjoining corridor. This effectively meant that Barbara Gosnold only had to recreate Murray-Leach's Panopticon in the studio, since the Vardan's control room was mainly a CSO screen, the Panopticon doubled as the chamber and the TARDIS was an existing set. She did, however, have to design the small length of corridor beyond the TARDIS control room's inner

door to match the brick walls and pipes of the locations that that would be used for the rest of the TARDIS interior. The brick walls were not what Read had in mind when writing his scripts, but this was the only resource available to Williams and Blake on location.

Costumes

On the costume front, Dee Kelly arranged a mixture of new costumes, stock items and copies of stock items. Louise Jameson retained Leela's lighter suede costume that she had worn in the previous two serials. The Time Lords and the Chancellery Guards generally had stock outfits or copies based on James Acheson's designs from *The Deadly Assassin* while the principal characters had special fittings. The Sontaran uniforms were based closely on the outfit worn by Kevin Lindsay in *The Time Warrior* [1973/4 – see Volume 20] and *The Sontaran Experiment* [1975 – see Volume 22] – and that original costume was actually worn by one of the Sontaran soldiers in Parts Four and Five.

Dee Kelly and Colin Mapson cast new lightweight foam helmets and collars for the Sontarans, each bearing an enhanced version of the forehead emblem on the original version. Stor's helmet had an extra band around it, and larger eyeholes. The Sontarans reverted to having three fingers, as seen originally in *The Time Warrior*. The three Vardan outfits seen in Part Four were enhancements of stock military uniforms hired from Berman's & Nathan's, a costume supply house.

Recording began on the afternoon of Sunday 6 November at 2.30pm for the scenes on the TARDIS control room set from the start of the story through to midway through Part Four at 5.30pm, with the remainder through to the start of Part Six scheduled for 7.30pm to 10pm, along with the opening and closing credits for Parts One to Three.

There was a continuity error at the start of Part One: Baker was not wearing his scarf when he entered the TARDIS control room, but for the later recording scenes on the Vardan ship, he was wearing the scarf. The TARDIS' internal loudspeaker was heard echoing the Doctor's voice as he spoke into it during Part Three. A mirrorlon shot was needed for Part Four showing Andred and K9 during the Doctor's tampering with the barriers. Towards the end of Part Five, the TARDIS screen was reactivated and showed a Sontaran battle fleet in arrow formation

as a red video effect against a starscape.

For the cliffhanger to Part Five where the TARDIS was destabilised, the OB camera was moved about wildly and over-exposed to give a negative image on screen.

Louise Jameson's departure from *Doctor Who* was reported in *The Times* on Monday 7 November, indicating that she was leaving the series 'next month' to 'concentrate on her stage career' in the story *Dr Who to lose his assistant*.

On the Monday, recording began at 2.30pm to complete the TARDIS scenes from the previous day, focusing on the scenes in Part Six which required the Sontarans.

Part Six saw Kelner, the trooper and Stor in the control room, with Deadman in full make-up for the first time. This latex creation was lighter than the masks endured by Kevin Lindsay, and cooler for Deadman to wear, who was the only Sontaran actor to remove his helmet. There were however problems in its application, causing the eyes and mouth to look very sunken with dark make-up around them. At the end of this sequence, as Stor prepared

Connections: Big fight

▶ When Leela complains about their apparently easy victory over the Vardans, the Doctor retorts, "Well, it can't always be like the relief of Mafeking, you know." Mafeking (now known as Mahikeng) was a town in South Africa that was under siege during the Second Boer War for 217 days. The siege was eventually lifted when 2,000 British troops fought their way in.



Left:

Stor with his helmet on, and (inset) with it off.



to enter the ship's interior, Deadman replaced his helmet on his head in totally the wrong position but carried on with the take regardless.

The Sontaran trooper was seen to burn through the interior door, barricaded by the Doctor, with a rod that illuminated red. A red video effect was superimposed on the door, and over the prop bar holding it shut which broke on cue by means of wires.

The final scene of the serial showed the Doctor alone in the TARDIS, dragging in a large cardboard box marked 'K9 MII' in black tape on its side.

The rest of the afternoon recording through to 5.30pm then covered the scenes in the Panopticon as far as the arrival of the Vardans at the start of Part Three. The Panopticon set included a raised circular dais resembling the 'Eye of Harmony' podium from *The Deadly Assassin* and the sound was echoed in post-production to give an impression of size. The scenes recorded

in the Panopticon included the Doctor's inaugural ceremony in Parts One and Two, during which the resin Matrix crown was seen to hover up into the Gold Usher's hands. For this shot, Charles Morgan was placed into the action using colour separation overlay (CSO) with the crown being raised on a blue-coloured support invisible to the image system. The crown included two amber gems that could glow when the circlet was in use, and recording breaks were scheduled for concealed wires powering these to be attached once placed on Tom Baker's head. During the ceremony, three inflatable red plastic cushions were seen carrying ancient artefacts: one of which was empty to represent the missing Great Key.

The first glimpse of the Vardans was in the Panopticon at the end of Part Two, where they appeared as shimmering energy forms: actually three silver PVC drapes CSOed on over the action. This allowed one Vardan to 'drift' across the screen and attack a Chancellery Guard by

Below:

The Vardans' true form is revealed.





moving the camera on the Panopticon set background, but holding the Vardan and its blue background steady on the other. The Vardans attacked with a superimposed silver video beam between their bodies and their victim. The effects for the Vardans had to be achieved in a manner that could be handled either on OB for later sequences, or easily in post-production. The original plan by Colin Mapson had been to reduce the harshness of the foil image of the Vardans by applying a layer of grease to the camera lens, but lack of time had ruled this out.

Vanishing Vardans

The evening session, from 7.30pm to 10pm, then continued on the Panopticon set with scenes for Parts Three and Four, plus the opening scene of Part Five; alongside this were recorded various effects of the Vardans shimmering which would need to be later superimposed on OB or film material, and also the opening and closing credits for Parts Four and Five.

In Part Four, the shot of Kelner stumbling on the Panopticon steps when a hole was made in the barriers was executed by reflecting the image off a rippling sheet of mirrorlon. The Vardans were made to vanish from Gallifrey by cross-fading from the set with the actors to the empty set,

and briefly superimposing the shimmering foil drapes by CSO again.

A morning recording session from 11am to noon on Tuesday 8 November, completed the scenes in the Panopticon. For the shot of the Doctor blasting Stor and his grenade, Tom Baker and the De-Mat Gun, which was built by visual effects assistants Chris Lawson and Peter Logan, were CSOed over the Panopticon set. An overlay then gave the silver beam from the weapon, and the background was flared to a white-out. Work then moved onto the first two scenes in the Vardan war room. This set was a simple affair seen briefly in Parts One and Two only, and featuring three high-backed chairs that would conceal the appearance of the two speaking aliens. Onto the blue CSO screen was placed a starscape for the opening scenes. After this, the screen showed strange pink video patterns while the Vardans monitored the Doctor's progress in the first two instalments – since there was as yet no relevant material recorded that they could see on screen. In the afternoon from 2.30pm to 5.30pm, the remaining Vardan war room scenes were recorded, and by this time the Panopticon had been redressed with plants and plastic reclining chairs as the 'Open Space' (also referred to as 'Open Area' or 'Open Place') set where the TARDIS materialised. The TARDIS' light continued to remain on after materialisation, although it was extinguished later in the story. The scene in Part Two where the Doctor returned to the TARDIS followed by both Leela and Andred's men, saw one of the guards

Left:

Kelner –
Castellan
of Gallifrey.

Connections: Sinking feeling

▶ When the Doctor discovers Borusa reading a copy of the *Daily Mirror* dated Tuesday 16 April 1912, and with a headline announcing the sinking of the *RMS Titanic*, he assures the chancellor that he had nothing to do with the disaster. More than 1,500 people died when the *Titanic* struck an iceberg on its maiden voyage from Southampton to New York.



Connections: Marching orders

▶ As in *The Face of Evil* [1977 - see Volume 26] and *The Talons of Weng-Chiang*, the Doctor is heard whistling the *Colonel Bogey March*, which was a popular tune composed by FJ Ricketts which he published in 1914 under the pseudonym Kenneth J Alford. The sheet music for the tune became a best-seller and was popularised during World War II when

crude lyrics about Hitler's anatomy were added to it.



using a cypher indent key (maintaining continuity to *The Deadly Assassin*) to open the capsule – in this case a standard Yale key set into a pink perspex block. Part Three required the scenes of Andred's men stunning the Doctor's bodyguard, and then the counter-attack by Kelner's men at the start of Part Four. New staser pistols had been built by Richard Conway for the serial and the sound effect was also changed, although the superimposed white star-cross effect from *The Deadly Assassin* was retained.

The scenes on the open space set from Part One

through to the first half of Part Four were recorded, with the remainder for the rest of the serial taped from 7.30pm to 10pm. Part Five had the Doctor and all his friends running back to the TARDIS, pursued by two Sontaran troopers who then opened fire on the ship. The Sontaran guns were rod-like battery-powered props, the ends of which illuminated yellow when 'fired', and were made by visual effects assistant Chris Lawson.

In Part Six, the Doctor left the TARDIS carrying the De-Mat Gun. Leela's last scene was also done in the chamber, using a split-screen cross-fade to show the TARDIS dematerialising on the left of the picture, and Leela, Andred and K9 on the right.

A photocall was held on this final studio day, with pictures taken of the Doctor and Leela arriving on Gallifrey. Location shooting on 16mm film took place for the following week. Work on Monday 14 began at the Laporte Industries sandpit filming scenes set in Outer Gallifrey and the

Outsiders camp for Parts Three and Four. This involved Louise Jameson and Hilary Ryan – now wearing cloaks and gloves – plus the artistes playing the Outsiders' and a couple of Time Lords. The first day – scheduled for 9.30am to 4pm – was spent on scenes at the encampment with the archery practice and also the Outsiders advancing on the citadel. To give an alien feel to these outdoor sequences, Ken Westbury placed a yellow filter over the camera lens to tint Gallifrey's atmosphere. Shooting was disrupted by noise since the site chosen was close to a railway and on an airport flight path, so often filming had to be done in short snatches of about 10 seconds.

Work at the sandpit on Tuesday 15, planned for 9.15am to 1pm, covered the scenes with Rodan and Leela after leaving the city in Part Three. An abandoned shot planned for Part Three was of Leela and Rodan running across the dunes, with a glass painting of the Capitol behind them. There was a photocall on the Tuesday morning for the Outer Gallifreyans.



Right:

The Doctor hides from the Sontarans by pretending to be a plant stand.



For the afternoon of the Tuesday, the crew moved to St Anne's Hospital, a former nursing home facility at Redhill which was owned by Surrey County Council. The mental illness wing was vacant and available for use, and had been selected for work by production assistant Colin Dudley due to both its proximity to the sandpits, and also the wide range of interiors it offered. Many rooms would be large enough to construct sets inside.

Panopticon control room

The first sequences shot from 2pm, and set up in the boiler room the previous day by Colin Mapson's team, were those of K9 stunning a guard and destroying the barriers in Part Two. Dummy control panels were rigged to explode and K9 was seen swivelling like a gun-turret in close-up, although no red beam was superimposed from his nose gun. Also filmed that afternoon was the Doctor making a hole in Gallifrey's defences which was added in post-production. Parts Five and Six also required scenes with Stor and Kelner at work in the same area, with a prop switchbox for Stor to punch in fury. In these shots, Deadman's eyes were clearly visible under his helmet, although he was not in Sontaran make-up.

On Wednesday 16 between 9am and 5.30pm, the scenes of the Doctor and his friends wandering through the same areas – such as Store 23A, Section 2-5 and Store 23B were filmed, along with the scenes in the Panopticon control room with the Doctor, Stor and Kelner (the scenes with K9 on his own having been filmed the previous day).

Further filming at St Anne's from 9am to 5pm on Thursday 17 included work on the staircases around a central iron-mesh lift cage. Another brick tunnel was used for TARDIS corridors in Part Six, and in one shot Stor appeared without his helmet. On this day, Deadman's Sontaran make-up was perfected, and in this sequence he appeared without the black rings around his eyes and mouth. Shooting also took place in a set of examination cubicles – the TARDIS sickbay (originally scripted as a gymnasium) where a pane of glass in a door was replaced with prop sugar-glass for Stor to smash through. Here it was seen that although the Doctor, Borusa, Leela and Andred all headed in different ways, they ended up in the same room due to the ship's unstable nature. This completed the week's work at the hospital, and the crew returned to London.

Friday 18 November was spent filming from 9am to 1pm at the headquarters of British Oxygen on Hammersmith Broadway in West London for all the scenes relating to the swimming pool and changing rooms. The action scenes here for Part Six were largely improvised on the day by stuntman Stuart Fell who was playing the principal Sontaran trooper. The sequence began with Borusa

Left:

K9 and Andred join forces.

Connections: Statuesque

▶ The TARDIS gallery appears to contain the Venus de Milo (or at least a copy of it). This Ancient Greek sculpture is believed to depict the Greek goddess of love, Aphrodite. The statue is named after the Greek island of Melos, which is where it was discovered in 1820.





Above:
The Sontarans
are revealed
as the true
invaders of
Gallifrey.

reading a replica edition of the *Daily Mirror* about the *Titanic* disaster. The period *Daily Mirror* with the headline *Japan surrenders* from 14 August 1945 was as specified in the script. There was also a brief insert shot for Part One of Leela swimming and playing with two large inflatable toys. The filming at British Oxygen was covered by an article in the company's in-house magazine *BOC Pennant* entitled *Dr Who Gets in the Swim*.

Following the filming, and after a short break, rehearsals began again for the remaining scenes at the Acton Rehearsal Rooms from Thursday 24 November to Saturday 3 December. On Friday 25 November, Tom Baker was offered a contract for the 1978/9 series of *Doctor Who* which would require his services as the Doctor between Sunday 11 March and Wednesday 20 December 1978. The same day, writing terms for the serial were formally agreed; the programme-as-completed documentation for the serial credited the writers as David Weir, Graham Williams and Anthony Read. Weir did not attempt to write for *Doctor Who* again; instead he focused on documentaries and further translations of NTV series including *Saiyuki* under the anglicised title *Monkey*. Living his later years as a recluse, he died in June 2011.

Work resumed at St Anne's at 11.30am on Monday 5 December for a fortnight of OB recording. Monday was devoted to the metalwork shop and basement rooms dressed as the TARDIS workshop and art gallery, as seen in Part Six. Dressing for the workshop, save blocking off windows, was minimal, so it was done first. These included the scenes of the Doctor and his friends leaving Rodan to construct the De-Mat Gun, the weapon's completion and the death of the trooper (who simply vanished in a cross-fade when hit by the beam), and the Doctor's return after obliterating Stor.

The art gallery scenes were recorded in a basement corridor in two sections: furnished and unfurnished. This allowed Kelner to deactivate the ancillary generator midway through the sequence (hidden in a prop of the Venus de Milo statue) so that the paintings would disappear in a cross-fade, with both Kelner and trooper off-screen.

Redressing sets

At 9.30am on Tuesday 6 December the crew then moved to a second floor room – apparently D8 – in which had been built the set for Rodan's space traffic control office; this was one of several rooms used by the crew for the week, the plan being that taping would go on in one while others were being redressed. These scenes, for Parts Two and Three, only involved Hilary Ryan and Louise Jameson, and a starscape showing the Vardan's atomic fleet superimposed on the main screen in Part Two. For loudspeaker announcements, the voices of Hilary Ryan and Chris Tranchell would be echoed in post-production.

Later in the day, recording moved to the President's room for Parts One and

Two (apparently room D14a), in Leela's room seen in Part One, and in Borusa's Chancellery (apparently room C12) seen in Part One and the start of Part Two. While the President's room was a spartan affair at this stage, the Chancellor's office included a secret door behind a tapestry which could be 'automatically' pulled up into the ceiling, and also a landscape picture made up of keys behind Borusa's desk. Although the script had the Doctor specifying the redecoration of his empty office as "seven three nine seven six", Baker instead reeled off a BBC telephone number ("four three seven zero eleven nine").

The scenes in Borusa's office were completed from 9.30am the next day. Tom Baker played one scene in Part Two in a distinctive manner to camera, telling the audience that "not even the sonic screwdriver's going to get me out of this one". The sonic screwdriver was also heard working on two different settings in this sequence. For an early scene in Part Five where Borusa listened in to events in the Panopticon, the Doctor's final line from the previous scene – "I was only trying to help" – was repeated over Borusa's

communicator to show that the two scenes were running simultaneously.

After this, the crew moved to Kelner's Castellan office which was Rodan's space traffic control redressed – the main difference being that the alcove on the right which had been the entrance to Rodan's office now housed Andred's control desk (a prop which had appeared in the James Bond film *The Spy Who Loved Me* filmed during 1976). The office's blue CSO screen allowed sequences recorded in TC8 to be viewed by Kelner during Part Two as he eavesdropped on conversations conducted outside the TARDIS, and also Gallifreyan computer graphics about the Time Lords absent from the Capitol in Part One. The Chancellery alarm system involved selecting a coloured ball and placing this in position on Andred's console. A light in the console was then flashed to make the translucent ball appear to glow. The Vardan effects were again used for various scenes in Part Three set in the Castellan's room.

Thursday 8 completed the scenes in Kelner's office from 9.30am, by which time the bare set of the President's room had been converted into the distinctive lead-lined chamber of cogwheel patterns seen in Parts Three to Five. This was entirely designer Barbara Gosnold's creation and was not featured in the script. The panels of wheels, some of which rotated, were specially constructed by the props manufacturing firm Trading Post, and were plastic sheets vacuum-formed over car wheels and gears.

Friday 9 continued with work from 9.30am in the Castellan's office for Part

Connections: Powerful art

▶ The pictures in the ancillary power room of the TARDIS include Joseph Turner's oil *The Fighting Temeraire* (1839), Jan van Eyck's oil *Arnolfini Portrait* (1434), Marc Chagall's etching *L'Aigle et L'Escargot* (1952) and Paolo Uccello's oil *Saint George and the Dragon* (circa 1470).



Left:

Time Lady Rodan isn't keen on the chilly weather outside the Gallifreyan citadel.



Above: Borusa and the Doctor discuss their options.

Four, the Chancellor's office for Part Five, and the President's room with a photocall for various scenes in Part Five that featured the Sontarans.

After the weekend, recording recommenced at 10am on the Monday with the completion of the scenes in the President's office.

By this time, the hospital's conservatory had been dressed to appear as the TARDIS green area, including a giant carnivorous vegetable pod (a two-part foam prop designed by Colin Mapson and constructed over a chicken wire base); this was operated by Mapson along with Richard Conway. This was for two sequences in Part Six; one where the Doctor, Andred and Rodan took a quick rest from their walk, and later on when the Doctor lured the Sontaran trooper into the pod, from which he was rescued by Stor – whose make-up had again been applied correctly meaning that publicity shots of Deadman could be taken that day. Tom Baker was so enamoured with the idea that the Doctor travelled with an animated vegetable in the TARDIS that he suggested Leela's replacement should be a talking cabbage

that could sit on his shoulder, to which he could explain the plot.

After this, recording took place in various corridors which had been redressed as part of the Citadel, some using forced perspective paintings at either end of the passage. This would complete all the material needed for Parts One to Five. This work continued until the Friday morning with recording from 9.30am each day, apart from Wednesday afternoon when the noise from a children's party being held in the building forced work to be abandoned. Now free, Tom Baker and Louise Jameson attended the event to the delight some younger fans of the show.

For the recording on Wednesday, during Part Four, two Chancellery Guards were felled by arrows shot in their backs – this effect being achieved by inserting the projectile shafts into the actors' costumes, but keeping them out of shot. At an appropriate moment, the actors would react to being hit and move to reveal the arrows, with sound effects dubbed on later. One Vardan was seen dematerialising during the OB material in Part Four – first

changing back into shimmering foil form in one of the corridors.

For recording on the Thursday, a set of stairs was also dressed accordingly for the Sontarans' pursuit of the Doctor's party in Part Five. A video effect was used when the Doctor and Borusa were protected by the Chancellor's personal force shield pendant.

Leela tree-topper

The final OB day was Friday 16 December which concluded the corridor scenes. When the Sontarans fired upon the Outsiders in Part Five, a red circular video effect was superimposed as they died. A similar effect to that for the Outsiders' arrows was used for a Sontaran having a knife thrown in its probic vent at the back of the neck by Ablif in Part Five.

On her last day of *Doctor Who*, Louise Jameson suffered an accident when she ran into a camera. Jameson departed *Doctor Who*, taking her Leela costume with her, on Friday 16 December. As a memento,

Louise was presented with a knife engraved with Leela's *Doctor Who* dates; this she later auctioned to raise £1,000 to aid Romanian orphans. Jameson had particularly enjoyed working with Gerald Blake since he made her laugh so much. Starting in February 1978, Jameson returned to the theatre with a season at the Bristol Old Vic, as well as recording an edition of the quiz *Celebrity Squares* (shown 11 February 1978 opposite *The Invasion of Time* Part Two).

Meanwhile, Tom Baker spent Monday 19, Tuesday 20 and Wednesday 21 at an event at Wembley Conference Centre where he met many young fans. Appearing on LBC Radio on Tuesday 20 he discussed his recent work on the Argo double LP *Journey to the Centre of the Earth* and how the money it was raising would be going to a charity dedicated to improving the lives of disabled youngsters. Meanwhile, as Louise Jameson prepared for Christmas that year, her mother stuck the Leela action figure marketed by Denys Fisher on top of the tree. ■

PRODUCTION

Tue 1 - Wed 2 Nov 77 Bray Studios
(Model work)

Sun 6 Nov 77 Television Centre Studio 6:
TARDIS Control, TARDIS Companionway

Mon 7 Nov 77 Television Centre Studio 6:
TARDIS Control, TARDIS Companionway, Panopticon

Tue 8 Nov 77 Television Centre Studio 6:
Panopticon, Vardan War Room; Open Area

Mon 14 Nov 77 Beachfields Quarry,
Redhill, Surrey (Moorland)

Tue 15 Nov 77 Beachfields Quarry
(Moorland; Moorland Clearing; Shelter);
St Anne's Hospital, Redhill, Surrey
(Panopticon Control Room)

Wed 16 Nov 77 St Anne's (Panopticon
Control Room; Walkway; Gasometer;

'Underneath' Area; Tunnel)

Thu 17 Nov 77 St Anne's (TARDIS
Stairway; TARDIS Corridor; Sickbay)

Fri 18 Nov 77 British Oxygen Building
Basement, Blacks Road, Hammersmith
Broadway, London (Changing Rooms;
Corridor; TARDIS Bathroom)

Mon 5 Dec 77 St Anne's Metal Workshop
and Basement Corridor (Workshop; Art
Gallery; Power Station; Corridor (Parts
Two/Three))

Tue 6 Dec 77 St Anne's D14a and C12
(Space Traffic Control; President's Office
(1); Leela's Room; Chancellor's Office (Parts
One/Two))

Wed 7 Dec 77 St Anne's C12 and D8
(Chancellor's Office; Castellan's Office for
Part One)

Thu 8 Dec 77 St Anne's D8 and D14a
(Castellan's Office for Parts One to Three)

Fri 9 Dec 77 St Anne's D14a (Castellan's
Office for Part Four; President's Office (2);
Chancellor's Office for Part Five)

Mon 12 Dec 77 St Anne's D8, D11
and D Corridor (President's Office (2);
Conservatory; Corridor for Parts Two and
Three)

Tue 13 Dec 77 St Anne's D Corridor
(Corridor for Parts One to Three;
Storeroom)

Wed 14 Dec 77 St Anne's D Corridor
(Corridor for Parts Two to Five)

Thu 15 Dec 77 St Anne's D Corridor
(Corridor for Part Five; Stairs)

Fri 16 Dec 77 St Anne's D Corridor
(Corridor for Parts Four and Five)

Post-production

E editing of the visual effects was done in a gallery session in TC3 on Sunday 18 December for which an EMI Special Effects Generator was hired. Further gallery sessions were held in TC3 on Wednesday 21 December, Wednesday 4 January and finally in TC8 on Sunday 5 February.

Dubbing took place on all six episodes throughout January. Here Dick Mills suggested that each part of the TARDIS seen in Part Six could have its own distinctive background noise, an idea which Gerald Blake objected to. Special treatment was given to Derek Deadman's voice in Parts Five and Six to make Stor's voice deeper and more resonant. All Stuart Fell's lines which he had spoken while wearing his Sontaran helmet were inaudible, and

Below:

Kelner betrays the Time Lords, and assists in the subjugation of Gallifrey.



these had to be redubbed. John Leeson's voice was not required at all for Part Five – although K9 appeared throughout the episode – and he was not credited.

Part One was marginally trimmed to remove a short scene in Borusa's office of the Doctor remarking that they should leave rather than keep anyone waiting.

During Part Five, after Stor ordered all units to take the President alive, there was a short scene of the Doctor's party in the corridors where the Doctor suddenly asked who invited Rodan; "She did," replied the traffic controller, pointing at Leela, which seemed to satisfy the Doctor. Meanwhile in his office, Borusa adjusted his controls in an attempt to locate the Doctor's group, just before they saw the Sontaran. There were various trims made to some of the scenes of various parties moving through the city corridors. After Ablif's death there was a short scene of Stor telling Kelner that the party were fleeing as they had no courage or will to resist: "Like you, Time Lord. Like all Time Lords!" After the Doctor bluffed the Sontaran to contact Stor, Borusa observed: "The master does indeed learn from the student." "It's also true of politicians," remarked the Doctor.

Lost Sontaran scenes

Part Six was trimmed for time and several film sequences were curtailed. This included a scene of Kelner leading Stor when the Castellan seemed lost, commenting about how the Doctor had altered his ship's tangential formation a lot over the years. Another sequence in the corridors had an infuriated Stor



demanding that Kelner locate the ancillary power unit; the Castellan suddenly realised that the Doctor was an individual (“That is a weakness. Only through unity is there strength,” remarked Stor) and that he would have disguised such a utilitarian unit with beauty. A short piece with the Doctor’s party was also dropped, as was a brief scene of Kelner telling the Sontaran that he was sure that they were about to enter the power unit. There was then an extended sequence of Stor walking along the TARDIS corridors... narrowly missing the Doctor who was also in the corridors with the De-Mat Gun.

On Monday 23 January, Blake’s contract was extended by a week to allow him to complete work on the serial. Due to the large crew involved on Parts Three, Four and Six (ie studio, film and OB teams having to be credited), extended versions of the closing credits were appended to these episodes with the full 1’09” version of the theme music last heard some years previously on stories such as *The Sea Devils* [1972 – see Volume 18] and *The Mutants* [1972 – see Volume 18]. The standard

52” version was retained on the other three instalments.

The Invasion of Time was scored by Dudley Simpson who was offered the work on Thursday 17 November 1977. Recording with a group of six musicians took place at Lime Grove from 10am to 1pm on Tuesday 17 January (Parts One and Two), 2.30pm to 5.30pm on Tuesday 7 February (Parts Three and Four) and 2.30pm to 5.30pm on Wednesday 22 February (Parts Five and Six). Around 33 minutes of music was recorded in total. As with previous stories set on the Doctor’s home planet – *The War Games* [1969 – see Volume 14] and *The Deadly Assassin* – Simpson made use of organ music in association with the Time Lords. The theme that Simpson had originated a couple of years earlier for Tom Baker’s Doctor was also used for scenes in Part Five.

Understandably, the making of *The Invasion of Time* was a stressful period for Graham Williams. The experience left him drained, and he was able to take a brief and much-needed holiday before beginning preparatory work on the 1978/9 series. ■

Above:

The Doctor and Andred unite against a common foe.

Publicity

Above:
"I am
Commander
Stor, of the
Sontaran
Special Space
Service."

- ▶ The Drama Early Warning Synopsis for *The Invasion of Time* was issued on Thursday 20 October, although the broadcast dates had still yet to be confirmed.
- ▶ The trailer on BBC1 for Part One showed the Doctor arriving on Gallifrey, only to have Andred and his men aim their staser pistols at

him. The programme billing for this episode in *Radio Times* also included a small black-and-white shot of Leela and the Doctor, while the listing for Part Six had a picture of Stor's face, taken on the conservatory OB day. Similar photos of Stor were widely circulated to the national newspapers to be run for the story's climax.

Broadcast

- ▶ *The Invasion of Time* concluded the 1977/8 series of *Doctor Who*, and was broadcast at 6.25pm on six consecutive Saturdays from 4 February 1978.
- ▶ The ratings for the serial were generally very good, particularly for the first two episodes. In opposition in most regions it faced the ITC documentary series *Havoc* followed by ATV's quiz show *Celebrity Squares*. Southern continued to run episodes of *The Six Million Dollar Man*, Westward and Channel screened *Happy Days*, Anglia opted for *Code R* while LWT and HTV overlapped *The Invasion of Time* with instalments of the new science-fiction film series *Logan's Run*.
- ▶ The main point of comment in the press was the departure of Leela with Peter Dunn of *The Sunday Times* writing on 19 March that disappointed fathers could join SOL – Save Our Leela. *The Sun* also claimed that Leela's presence in the series had increased the proportion of adult viewers to 60%.
- ▶ On Tuesday 14 February, Tom Baker donned the Doctor's coat and scarf over his own civvies to promote a package of 98 *Doctor Who* episodes (*Robot* [1974/5 – see Volume 22] to *The Invasion of Time*) available for syndication to PBS stations in North America, on the grounds that *Star Wars* had made science-fiction popular. Various bodies were persuaded to fasten themselves into costumes for



a Sontaran trooper, a Wirrn, a Zygon, a Voc robot and a Dalek casing standing with the programme's star and K9 outside the United States Embassy in London's Grosvenor Square. This was reported in the story *Dr Who and the Pilgrims of Horror (Episode one)* in the *Daily Express* on Wednesday 15.

- ▶ Distribution of *Doctor Who* in the USA was to be handled by Time-Life which had previously marked a package of 72 Jon Pertwee episodes since 1972. Each episode was shortened by about two minutes to allow for extra commercials, plus a 'next episode' teaser on all but final instalments and a 'this serial' trailer at the start of every Part One. There was also a voice-over to the action appended by veteran American character actor Howard da Silva by the time the episodes started airing in mid-1978. This saw the true

Above:
The Doctor and some old 'friends' promote *Doctor Who* outside the US Embassy in London.

Right:
Rodan is a little out of her comfort zone.

start of *Doctor Who* fandom in the USA; prior to that the Pertwee episodes had attracted little attention.

- Following the broadcast of Part Four on Saturday 25 February, BBC continuity promoted the 7" single of the theme from the series which had been reissued in a picture sleeve.
- Doctor Who* was also being used at this time to illustrate education topics. The lecture *Creating the System* in the Open University's Course D303 on Cognitive Psychology on Monday 27 February 1978 saw extracts from Part Four of *Robot* being used to demonstrate the popular science-fiction view of artificial intelligence.
- Graham Williams wrote to Graeme McDonald on Tuesday 7 March to reiterate points raised at their meeting to discuss the final episode of the serial. Williams said that Baker had added his own gags to the repetition material (such as tripping over his scarf, the sundial being slow, etc). Another problem was that nobody took Derek Deadman seriously. A memo would in future be issued to directors that the show would be taken seriously; humour was important as



relief, but should not be overplayed at the expense of tension.

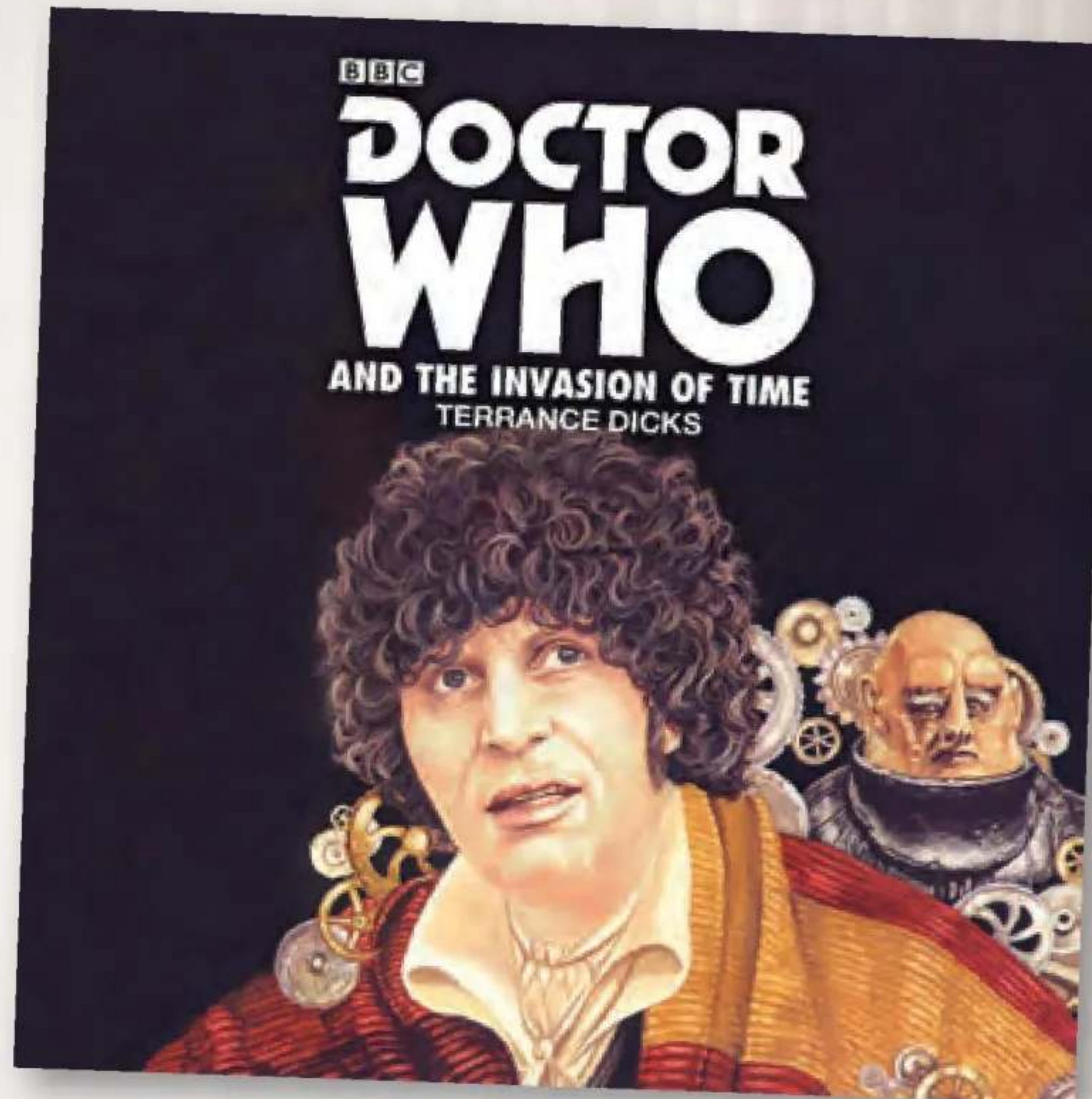
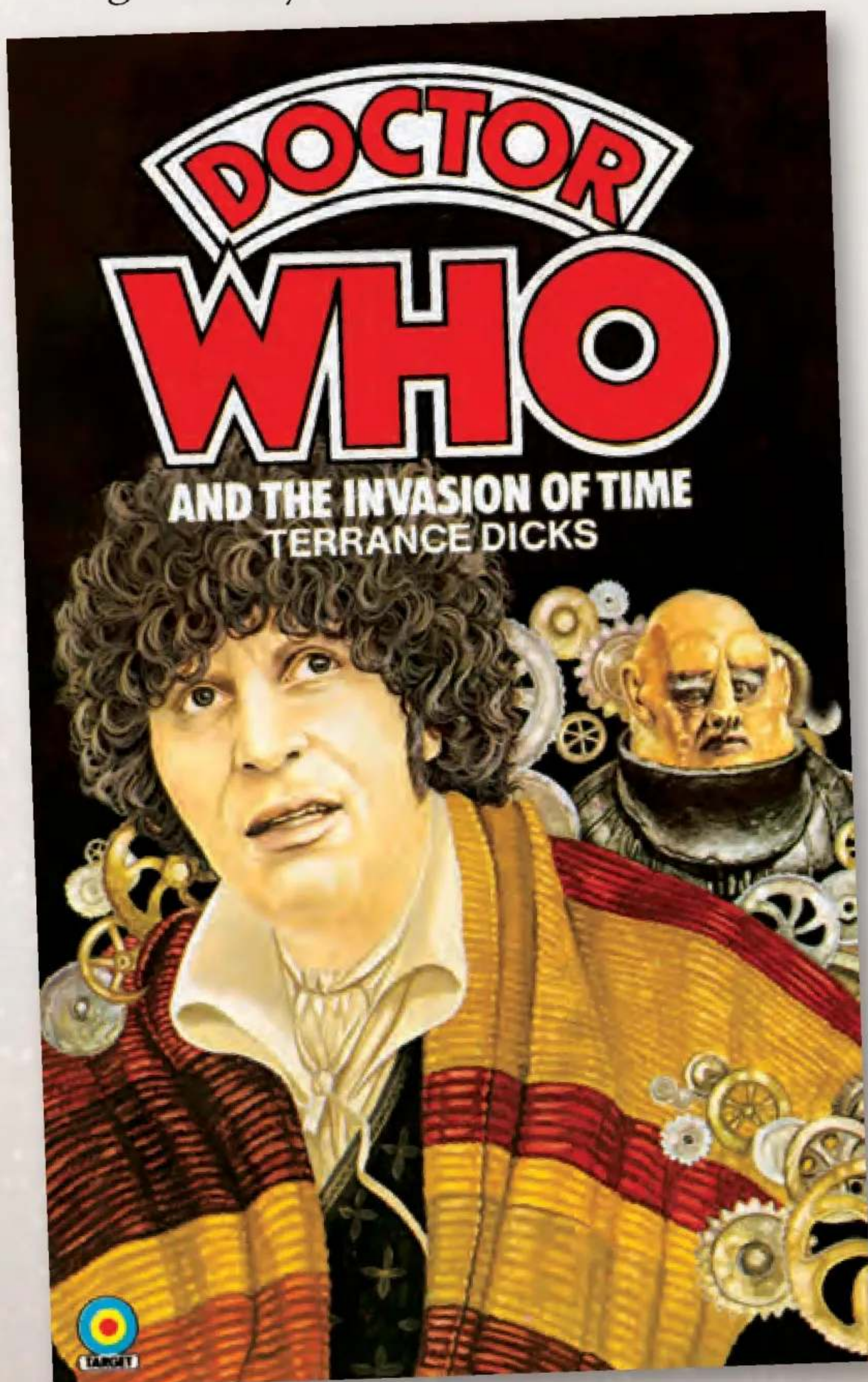
- Success of the sexy savage* was the title of Mary Malone's piece about Louise Jameson – then rehearsing *A View from the Bridge* – in the *Daily Mirror* on Saturday 11 March.
- Following the final episode of the series, Peter Dacre's interview with Tom Baker appeared in the *Sunday Express* on 12 March.
- The Invasion of Time* was sold to Australia in July 1978, where it was screened with a 'G' rating. It has also been sold for broadcast in several other territories, including Costa Rica, Gibraltar, Canada, Ecuador and Honduras.
- The Invasion of Time* first appeared on UK Gold in March 1994 in episodic form, and from April 1994 was also shown in omnibus form. BBC Prime screened the story from March 1999.

ORIGINAL TRANSMISSION

EPISODE	DATE	TIME	CHANNEL	DURATION	RATING (CHART POS)	APPRECIATION INDEX
Part One	Saturday 4 February 1978	6.25pm-6.50pm	BBC1	25' 00"	11.2M (28th)	56
Part Two	Saturday 11 February 1978	6.25pm-6.50pm	BBC1	25' 00"	11.4M (29th)	-
Part Three	Saturday 18 February 1978	6.25pm-6.50pm	BBC1	25' 00"	9.5M (47th)	-
Part Four	Saturday 25 February 1978	6.25pm-6.50pm	BBC1	23' 31"	10.9M (28th)	-
Part Five	Saturday 4 March 1978	6.25pm-6.50pm	BBC1	25' 00"	10.3M (32nd)	-
Part Six	Saturday 11 March 1978	6.25pm-6.50pm	BBC1	25' 44"	9.8M (35th)	-

Merchandise

The story was novelised with various changes (eg Jasko and Ablif combine to become Jablif) by Terrance Dicks, as *Doctor Who and the Invasion of Time*; Graham Williams had been invited to write the book, but turned it down because the remuneration was lacking. This was published simultaneously in February 1980 in paperback by Target and by then parent company WH Allen in hardback. The cover was painted by Andrew Skilleter and the paperback was latterly reissued as book number 35 in the Target library.



The novelisation of *Doctor Who and the Invasion of Time* was released as a BBC Audio in September 2016, read by John Leeson.

The BBC Video of *The Invasion of Time* was released in March 2000. The DVD/Blu-ray release came in May 2008. It included the following extras:

- ▶ **Commentary** by Louise Jameson, John Leeson, Anthony Read and Mat Irvine
- ▶ **Out of Time** - making-of documentary
- ▶ **Deleted scenes**
- ▶ **The Rise & Fall of Gallifrey** - documentary
- ▶ **The Elusive David Agnew** - featurette
- ▶ **Continuity**
- ▶ **CGI effects**
- ▶ **Photo gallery**
- ▶ **Easter Egg** - Colin Mapson's Prop Talk
- ▶ **Radio Times listings** in Adobe PDF format
- ▶ **Production subtitles**

The Invasion of Time was also released as part of the *Bred for War: The Sontaran Collection* BBC DVD and Blu-ray in May 2008 and as part of GE Fabbri's *Doctor Who* – DVD Files issue 118 in July 2013.

This page:

Andrew Skilleter's illustration was used on the original novelisation, and the subsequent BBC Audiobook.

THE INVASION OF TIME

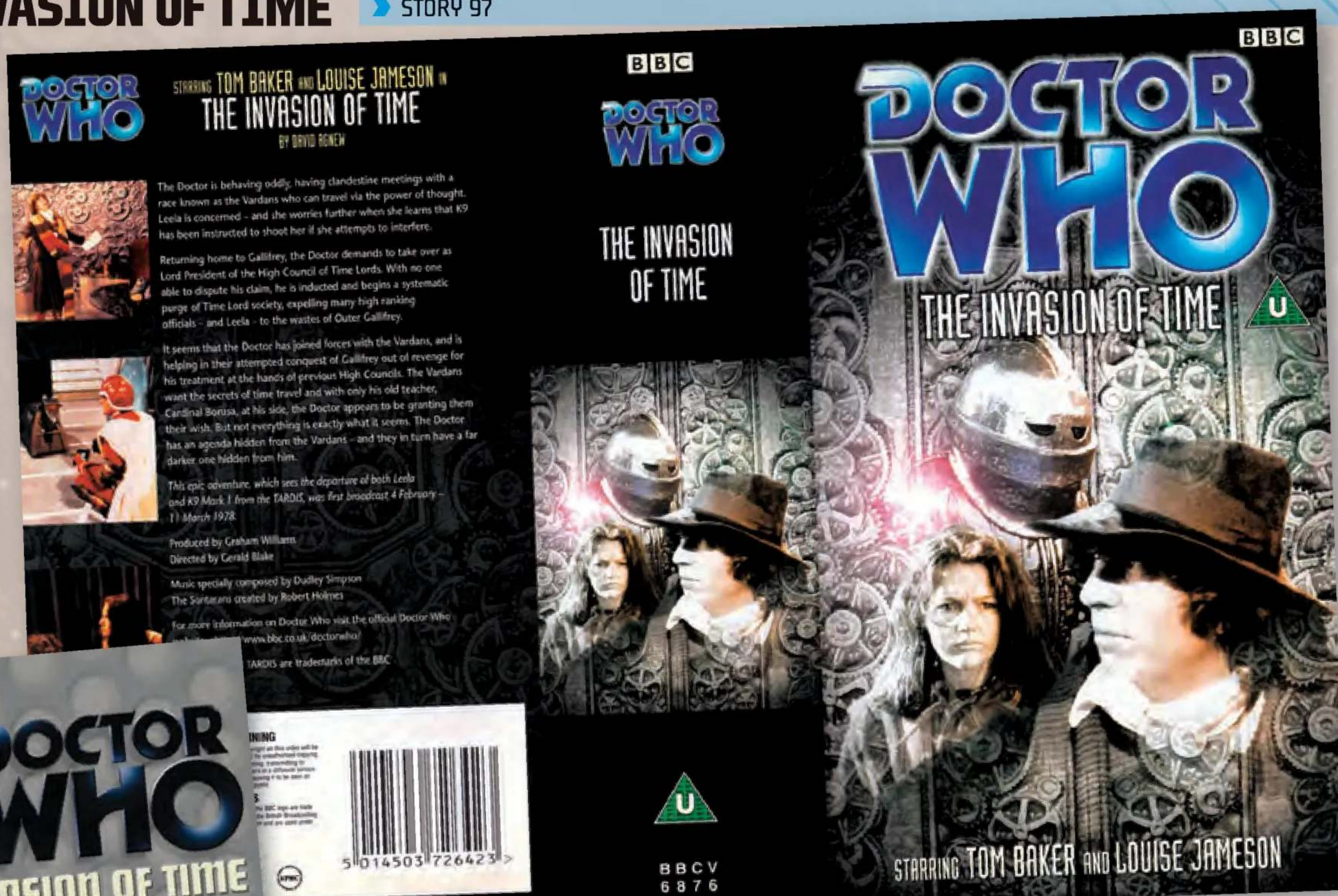
▶ STORY 97

Right and below:

The video and DVD covers for *The Invasion of Time*.

Bottom:

Doctor Who – Sound Effects No. 19 was released in May 1978.



The LP/cassette *Doctor Who – Sound Effects No. 19* was released by BBC Records in May 1978. It included the following tracks from *The Invasion of Time*: *Vardan Gun*, *Sontaran Gun*, *Gallifreyan Staser*, and *Dematerializer*

Gun. The sound effects of the Vardans, K9's probe and gun, and the TARDIS doors were included on the CD *Doctor Who: 30 Years at the Radiophonic Workshop* issued in July 1993 by BBC Enterprises.

Incidental music from Parts Three and Four of the serial was later included as part of Silva Screen's four-disc CD set *The 50th Anniversary Collection* in December 2013 and the later 11-disc set in September/November 2014.

Metal models of a Sontaran Warrior and Commander Andred were issued by Harlequin Miniatures in 1998/9. Action figures of Leela and Commander Stor were available from Underground Toys USA in November 2011. The figure of Leela came with knife and De-Mat Gun accessories. Commander Stor came with a helmet and gun accessories. ■

Right:

Underground Toys' figures of Leela and Stor.



Cast and credits

CAST

Tom Baker	Doctor Who
with	
Louise Jameson	Leela
Stan McGowan	Vardan [1-4] ¹
Chris Tranchell	Andred
Milton Johns	Kelner
Tom Kelly	Vardan [1-2, 4]
John Arnatt	Borusa [1-3, 5-6]
Dennis Edwards	Lord Gomer [1-3]
Reginald Jessup	Lord Savar [1]
Charles Morgan	Gold Usher [1-3]
Christopher Christou	Guard [2]
Hilary Ryan	Rodan [2-6]
Michael Harley	Bodyguard [3]
Max Faulkner	Nesbin [3-6]
Ray Callaghan	Ablif [3-5]
Gai Smith	Presta [3-6]
Michael Mundell	Jasko [3-5]
Eric Danot	Castellan Guard [4]
Derek Deadman	Stor [4-6]
Stuart Fell	Sontaran [5-6]
John Leeson	Voice of K9 [1-4,6]

¹ Credited in *Radio Times* as Vardan Leader

UNCREDITED

Christopher Christou, Michael Harley, Eric Danot, Peter Roy, Mort Jackson, Tony Snell, Buddy Prince, Robert Smythe..... Guards



Giles Melville, Martin Grant, Michael Sliwoski, John Tucker, James O'Neill, Laurie Goode and 10 other unknown extras.....

..... Time Lords

David Melbourne, Alan Forbes, Mike

Mungarven, Bobby James..... Outer Gallifreyans

Mark Holmes, Derek Hunt.. Expelled Time Lords

Julian Hudson..... Vardan

Martyn Richards, Norman Rochester.....

..... Sontarans

CREDITS

Written by David Agnew [pen-name for Graham Williams and Anthony Read]

Title Music: Ron Grainer and the BBC Radiophonic Workshop [6]

Title Sequence: Bernard Lodge [6]

Incidental Music by Dudley Simpson

Production Assistant: Colin Dudley [uncredited: Terry Winders]

Production Unit Manager: John Nathan-Turner

Studio Lighting: Mike Jefferies

Studio Sound: Anthony Philpot

O.B. Lighting: John Sterling

O.B. Sound: Ian Leiper

Film Cameraman: Ken Westbury²

Film Recordist: Graham Hare²

Film Editor: Chris Wimble²

Visual Effects Designers: Richard Conway, Colin Mapson

Special Sound: Dick Mills

Costume Designer: Dee Kelly

Make-up Artist: Maureen Winslade

Script Editor: Anthony Read

Designer: Barbara Gosnold

Producer: Graham Williams

Directed by Gerald Blake

BBC © 1977

² Credited on Parts Three, Four and Six only

Left:

The Doctor makes for an unlikely Time Lord President.

Profile

JOHN ARNATT

Borusa

John Edwin Arnatt was born in Petrograd (now Saint Petersburg), Russia on 9 May 1917, to an English family; his father Francis was a manager there for Vauxhall cars. The Russian Revolution happened the year John was born and the family soon fled home.

He was educated at Epworth College, Rhyl, Wales before training at RADA.

One of his earliest stage appearances was in *Little Ol' Boy* at the Arts Theatre (1936). He made his West End début alongside double act Flanagan and Allen in *Happy Returns* (1938/9, Adelphi, London). Joining the Howard & Wyndham theatre players, their production of *Abraham Lincoln*, with Arnatt in the title role, aired on BBC radio in July 1939.

Following wartime army service, his wide-ranging career included his television début in a BBC adaptation of *A Tale of Two Cities* (1948; as *The Only Way*), regular radio including Rep work for *The Adventures of PC 49* (1949), B-picture movies such as *Dick Barton at Bay* (1950) and a spell as a stand-up comic at Soho's Windmill Theatre. He also turned his hand to classical theatre, portraying Richard Plantagenet/Duke of York in *Henry VI Parts 1, 2 and 3* (1953) for Birmingham Rep, transferred later that year to London Old Vic. He was acclaimed for *The Cherry Orchard* (1953/4, Bristol

Old Vic). Arnatt even moonlighted as a pseudonymous ITV sports commentator 'Howard Peters' in the mid-50s.

He regularly took guest spots in many film series made for commercial television: *Colonel March of Scotland Yard* (1954), *Sword of Freedom* (1957), *HG Wells' Invisible Man* (1959), *Sir Francis Drake* (1962), *The Saint* (1962) and *The Human Jungle* (1963).

Notably, he replaced Alan Wheatley's Sheriff of Nottingham in the fourth series of ITV's popular film series *The Adventures of Robin Hood*, playing the villainous Deputy Sheriff during 1960. He would also be Sheriff proper in movie *A Challenge for Robin Hood* (1967). Another early recurring TV role came as Dr Fitzgerald in a number of episodes of *Emergency Ward 10* (1963/4).

Arnatt became recognised for urbane, impeccably dressed types, with hallmarks of a pencil moustache and clipped diction.

He was spy boss Rockwell in a series of James Bond clone movies, beginning with *Licensed to Kill* (1965) and concluding with notorious Gareth Hunt vehicle *No 1 Licensed to Love and Kill* (1979). Other movies included *Hysteria* (1964), *Our Mother's House* (1967) and *Crucible of Terror* (1971).

Arnatt was best known however for donning trilby and mac as a procession of narrow-eyed, flatfoot police detectives.



One of his earliest came in an *ITV Television Playhouse* entry *I Passed by Your Window* (1955), before going on to play various Detective Inspectors and Superintendents in *My Friend Charles* (1956), *The Impersonator* (1961), *The Third Alibi* (1961), *Whistle Down the Wind* (1961), *The Set Up* (1963), *Dr Crippen* (1963) and *Paganini Strikes Again* (1973). TV 'tecs included *Strange Report* (1969) and *Randall & Hopkirk (Deceased)* (1970). He also played former police detective Sidney Bulmer in two series of legal drama *The Main Chance* (1969/70).

Other TV guest roles, usually as authority figures and aristocrats, came in *Callan* (1969), *Take Three Girls* (1970), *Pathfinders* (1972), *Freewheelers* (1973), *Special Branch* (1973), *General Hospital* (1974), *Thriller* (1974), *Crown Court* (1975), *The Cedar Tree* (1977), *The Onedin Line* (1979), *The Professionals* (1980) and *The Cleopatras* (1983).

He was a reverend in *Miss Marple* (1985) and found plenty of work as upper-class twits and eccentrics in the sunset of his career in *Bluebell* (1986), *House of Cards* (1990), *Lovejoy* (1993), *The Inspector Alleyn Mysteries* (1993), *Dangerfield* (1995) and *A Royal Scandal* (1996).

Arnatt's comedy career stretched as far back as *Sykes* (1964), *Steptoe and Son* (1970) and *The Dick Emery Show* (1972/3) but in his latter career found much straight man work in *Rings on Their Fingers* (1980), *The Kenny Everett Television Show* (1981-6), *Kelly Monteith* (1981/2), *Shelley* (1981), *The Les Dawson Show* (1982), *Don't Wait Up* (1983), *Trippler's Day* (1984), *If You See God, Tell Him* (1993), *Keeping Up Appearances* (1993) and, his final credit, sitcom *Dad* (1999).

His first marriage, to Betty Huntley-Wright in 1948, was later dissolved. He married broadcaster Sheila Tracy in 1962 and they had one son.

Arnatt died on 21 December 1999, in Surrey, aged 82. ■

Left:
John Arnatt
in *The Royalty*
in 1958.



1978/9 SERIES

1978/9 series

Viewers new to *Doctor Who* since it returned to the screens in 2005 would probably be taken aback if a series did *not* contain some sort of story arc – a longer form narrative seeded throughout the series to reward regular viewers, but not so dominant as to alienate any who dip in and out. But long before being told to be afraid of the big Bad Wolf or to put a cross in Saxon's box or keep an ear cocked for the falling of Silence, the Doctor was given an explicit quest which united all of the adventures he conducted in the 1978/9 series.

The search for the Key to Time – a mysterious object capable of resetting the

universal balance which has been split into six segments, now hidden all over space and time – dominates some of the 1978/9 series' adventures and is dealt with quickly in others. But we are never short of reminders that no matter what the peril of the week is, there is a quest of greater importance afoot. Sometimes the segment of the Key to Time is a vital plot driver, sometimes it is a mere distraction. Disguising itself as one of the most valuable minerals in the galaxy – jethrik – doesn't exactly make it easy to hang onto or likely that it will languish in anonymity, but this chimes neatly with the comic tenor of the series' first story *The Ribos Operation* [1978 – see page 92], a crime caper awash



1978/9 series

- *The Ribos Operation*
- *The Pirate Planet*
(see Volume 29)
- *The Stones of Blood*
(see Volume 29)
- *The Androids of Tara*
(see Volume 29)
- *The Power of Kroll*
(see Volume 30)
- *The Armageddon Factor*
(see Volume 30)

'THE DOCTOR WAS GIVEN AN EXPLICIT
QUEST WHICH UNITED ALL THE
STORIES IN THE SERIES.'

1978/9 SERIES



Above:
The Captain is assisted by Mr Fibuli in *The Pirate Planet*.

with colourful characters and double crosses. The last act of the final episode is for the Doctor to re-pilfer it from galactic conman Garron. *The Pirate Planet* [1978 – see Volume 29], an equally colourful but slightly more offbeat story, is about the gutting of entire worlds for greedy profit and so its segment's fancy dress of choice – An Entire World – is thematically apposite.

The segments, however, aren't merely passive objects. This is the Key to Time we're talking about after all. And so, in *The Stones of Blood* [1978 – see Volume 29], that fact that the Great Seal of Diplos is a segment imbues the trinket with special powers which enable the baddie to do her bad stuff – similarly, the nasty beast at the heart of *The Power of Kroll* [1978/9 – see Volume 30] owes its great size to the fact that it swallowed the Big MacGuffin whole. If you're wondering why *The Androids of Tara* [1978 – see Volume 29] has been glossed over – well, that's because it does its own fair share of glossing: the segment is discovered very early, disguised as part of a statue, in order that it doesn't get in the way of the story the writer *really* wants to tell.

And so to *The Armageddon Factor* [1979 – see Volume 30], in which the segment is a person, the Princess Astra, which

brings with it a moral dilemma for our protagonists which is quickly dispensed with as the showdown with the Black Guardian is won by the Doctor, all of the segments are dispersed, with the sixth segment turning back into Princess Astra. Although we don't know for sure, presumably Count Grendel gets the missing bit of his statue back, Garron can nick his jethrik again, and another squid can swallow a Swampie relic and grow to gigantic proportions before killing anything that gets in its way. So it's probably worth cancelling that trip to Delta Magna right now.

As a device to lure extra viewers it is debatable whether the series really benefitted from the story arc, or umbrella theme as it was known then (clearly now that there's been a flood of these things, an umbrella is deemed scant protection and we need an arc instead). At its best it provides some extra jeopardy to an episode – sometimes it appears as if the Time Ring from *Genesis of the Daleks* [1975 – see Volume 23] has been given its own series. When that was introduced, the Time Lord who handed it to the Doctor

Right:
Cessair of Diplos is unmasked in *The Stones of Blood*.



was good enough to explain just how vital it was that he may as well have said, “This is so important that you’re bound to lose it at least a couple of times over the next six weeks, so look out for that.” The Key and the tracer fulfil a similar function this year. The search for the segments is generally woven rather cleverly into the plot, but the meat of the Key story can be found in two extended scenes which heavily feature a new addition to the show’s mythos, the Guardians.

Good versus evil

The Black and White Guardians are the closest the *Doctor Who* universe has got to gods. All-powerful beings who exist where there are no shades of grey, theirs is a pure battle of good versus evil. The Doctor is clearly very deferent to them, he is almost bashful at the start of *The Ribos Operation*. The White Guardian’s threat that “nothing will happen [to you]... ever” is enough to convince the Doctor that he has to fulfil the task he has been assigned and is the first sign that the Time Lords might not be at the very top of the All-Powerful Beings Tree after all (something which had grown increasingly more obvious with most of their appearances since *The War Games* [1969 – see Volume 14]).

If the scene between the White Guardian and the Doctor at the beginning of *The Ribos Operation* lays the plot on quite thickly, then the memorable scene in *The Armageddon Factor* – in which Tom Baker flutters his eyelids to suggest that he might have been taken over by evil impulses – demonstrates just how much the leading man is dictating the tone of what is happening on screen. The 1978/9 series isn’t the first time that Tom Baker has fooled about, but it is perhaps where he is



at his most changeable. It certainly features some of his most bizarre acting choices – notably putting a drink he has just been given (in *The Power of Kroll*) into his pocket. There are also the first signs that what he is doing is starting to influence his fellow actors – the ripper guest performances of the following series can trace their lineage back to Davyd Harries as Shapp in *The Armageddon Factor*, who is relatively normal in the first studio block but by the second is clearly trying to keep up with his leading man and ends up pulling silly faces and doing a pratfall.

The thing about Tom Baker though, is that beneath the occasionally wayward eccentricities there is a gutsy, sometimes frighteningly powerful actor. The Fourth Doctor isn’t a walking clown – he is an intelligent being of unpredictability and the 1978/9 series features some of his liveliest, most engaging moments. His oft-lauded righteous anger when confronted with the Pirate Captain’s plans show the ferocity of the Doctor’s moral outrage, while his sword fight with Grendel in the *The Androids of Tara* reveals the steely ability and grit beneath his insolent and funny exterior. Baker clearly relishes facing off against big characters played by good actors and he definitely gets his opportunity here.

It is worth noting that a decent proportion of the major protagonists this year are women. As well as being the cool and intelligent new companion, Romana, Mary Tamm plays Princess Strella and her android doppelgängers in *The Androids*

Above:

The Doctor decides to save the Swampies in *The Power of Kroll*.

1978/9 SERIES

'TOM BAKER IS CLEARLY ENCHANTED
BY BEATRIX LEHMANN.'



of Tara, and there is meaty work too for female guest stars such as Rosalind Lloyd (*The Pirate Planet*) and Lalla Ward (*The Armageddon Factor*), as well as Beatrix Lehmann and Susan Engel in *The Stones of Blood*, a story in which, unusually in terms of onscreen talent, the women outnumber the men.

Villainous guests

More women then, but fewer monsters. Indeed, what the 1978/9 series lacks in scary creatures it makes up for with a high quota of beguiling, villainous guest characters. *The Ribos Operation* has a likeable rogue in Garron (who clearly entertains the Doctor) and a very plausible psychopath in the Graff Vynda-K. *The Pirate Planet's* Captain, for all his bluster, is clearly covering up an inner vulnerability and a fractured mind and is far more than just a ranting villain. And while he may not get much of an opportunity to face off against the Cessair of Diplos, it doesn't really matter because Tom Baker is clearly enchanted by Beatrix Lehmann. This gives the Doctor's scenes with Professor Rumford a special energy, despite that fact that her grip on her lines is as tenuous as Baker's sometimes appears on reality.

The Stones of Blood, while possessing the series' trademark interesting characters, also has the season's most effective monster. The Ogri are effectively rendered and do the favoured *Doctor Who* trick of taking something we all know – in this case large ancient stones – and turning them into nightmarish killing machines. To be fair, they don't have much competition – the Shrivenzale in *The Ribos Operation* is really window-dressing (with rather flappy fingers) designed for emergency cliffhanger duty, while Kroll, despite being an excellent model, doesn't do that much apart from rise out of the swamp precisely halfway up the picture and eat people who aren't needed by the plot any more. Still, it is a very big monster which makes up for the fact that Thawn is a rather one-note villain – miles away from Peter Jeffrey's Count Grendel in the preceding adventure: a charming swine who deserves his chance to return and fight another day. Faced with Peter Jeffrey's note-perfect villainy, Tom Baker is on his best behaviour and the scenes between them sparkle.

Appropriately for the last story, *The Armageddon Factor* has three villains of escalating threat value – the Marshal is a slightly psychotic Churchill who is in fact the pawn of the grotesque Shadow, a

Left:

The Shrivenzale flaps its fingers in *The Ribos Operation*.



Left:

Count Grendel of Gracht.

1978/9 SERIES

Above: The Doctor and Romana's quest for the Key to Time reaches its climax in *The Armageddon Factor*.

beguiling creature of uncertain form who is himself a chess piece of the Black Guardian. When the latter finally appears, he spends most of his screen time pretending to be the White Guardian, despite the fact that Valentine Dyall, who plays him, is most famous for being The Man in Black on the radio so he is fooling no one. However, this does handily emphasise that good and evil are two sides of the same coin.

The lack of monsters can perhaps be attributed to the unique flavour of the adventures this series. The *Doctor Who* universe of the 1978/9 series is one in which future worlds seem medieval, and in which the present day is quaint and eccentric. It is a series of fairytale and whimsy, where even the futuristic war between Atrios and Zeos – in a story with hard science-fiction ambitions – has a princess and a dashing young hero. *The Power of Kroll*, the story that probably fits

most easily into the mould of traditional *Doctor Who* (futuristic base with squabbling occupants and insane commander is besieged by monster) seems to be the anomalous one in this year of adventures that have raided the BBC's period costume cupboard, filmed in the countryside and eschewed gritty violence for derring-do and breathless adventure.

Having lost his companion Leela, the Fourth Doctor needs another strong woman in order to provide balance for his dominant personality. This was never going to be an easy task, so the introduction of Romana, a dignified, smart, and clearly more academically disciplined Gallifreyan than the Doctor, is an effective replacement for the instinctive savage from the year before. Once again we see the *Doctor Who* production team working hard to avoid the cliché of the screaming, useless female sidekick. Romana also gives as good as she gets in

the verbal sparring stakes and has a nice line in dry humour.

The other Time Lord we meet this year, likeable scallywag Drax, is largely there for comedy – a sort of intergalactic Del Boy – and the level of humour in the scripts is pretty consistently judged all year. Robert Holmes deploys his gift for characterisation, dialogue and world building to bear on *The Ribos Operation*. Garron and Unstoffs clearly have a great rapport, as do Sholakh and the Graff whose past exploits and current off-screen troubles are skilfully and economically detailed in throwaway lines. Slightly more unusual, but no less effective, is the inclusion of Binro the Heretic who adds very little to the plot but provides some fine character moments. Unstoffs telling the rejected old man that his scientific theories are true is possibly the single most redemptive scene in the whole of the series – and it is bestowed upon a character who isn't even introduced until Part Three!

Holmes doesn't have quite so much fun with the characters in *The Power of Kroll*, instead spending much of his time lampooning religion. High Priest Ranquin's constant justifications of why things are going wrong for the Swampies, with their own god attacking and killing



them, are straight from the zealot's handbook. "What is one life?", "It is a test of our faith," is the sort of guff he comes out with and then, when the tentacles hit the fan, he falls to his knees in prayer when everyone turns to him for an answer. It is the closest the season gets to satire. The message is aided in no small part by a gallantly po-faced (and therefore very funny) performance from series stalwart John Abineri, who like Philip Madoc and Cyril Shaps – two other distinguished character actors who have given the show great service in different roles over the years – makes his final appearance in the show this series.

Eccentric adventuring

Holmes would not return to *Doctor Who* for some years, but his obvious inheritor is Douglas Adams, whose script for *The Pirate Planet* is full of madcap science-fiction ideas, good jokes and colourful characters. David Fisher too has a none-too-mean grasp of the comedy aspects of the show, with his delightfully batty female protagonist and annoyingly literal justice machines in *The Stones of Blood*, and his gift for a cracking line or two in *The Androids of Tara* ("Would you mind not standing on my chest, my hat's on fire" and, "Now this takes me back, or forward? That's the trouble with time travel, you never can remember" – two that spring to mind among many others).

But the humour never totally dominates – the overriding drive of the 1978/9 series is one of zesty adventure. It doesn't mind embracing cliché or wearing its influences on its sleeve, but when it works at its best it shows that the series doesn't need violence or monsters to provide the sort of eccentric adventuring that goes to the very core of *Doctor Who's* appeal. ■

Left:

Swampie High Priest, Rankin, is having a bad day.



THE RIBOS OPERATION

➤ STORY 98

The Doctor is summoned by the White Guardian, and tasked with finding the six segments of the Key to Time. Together with his new Time Lady companion, Romana, the Doctor travels to the feudal world of Ribos, in pursuit of the first segment.



Introduction

The *Ribos Operation* was the first of six stories – making up the 1978/9 series – that would see the Doctor and his new companion Romana track down the six segments of the Key to Time. This type of quest had already featured before in *Doctor Who* – as early as its first series. *The Keys of Marinus* [1964 – see Volume 2], written by Terry Nation, tasked the original TARDIS team with collecting together another set of ‘keys’, also hidden in disparate locations.

An ingenious gimmick this time around, however, was that the keys could disguise themselves. In their native form they look like a valuable jewel. In *The Ribos Operation*, the first segment of the Key to Time is disguised as... a valuable jewel.

It’s uncertain whether this was simply to help establish the concept, or whether writer Robert Holmes found the idea of disguising one jewel as another amusing.

It does, perhaps, indicate that Holmes wasn’t that interested in exploring the linking theme, and was happier telling his own story. Ribos itself is a very interesting world. Like *The Snows of Terror*, the fourth part of Terry Nation’s quest story, Holmes’ serial took place in snowy territory. The planet’s orbit resulted in extreme weather and seasons that sustained for decades. It’s one of the more interesting, well-thought-through alien worlds devised in *Doctor Who*.

It’s the extraordinary people that the Doctor meets on Ribos, however, that bring the story to life: the unscrupulous

'THE EXTRAORDINARY PEOPLE
THE DOCTOR MEETS ON RIBOS BRING
THE STORY TO LIFE.'

Garron, the vain idiot Graff Vynda-K, the bizarre Seeker and the tragic Binro.

If you ignore the loosely connected nature of some of *Doctor Who*'s earliest episodes, the 1978/9 series was the first time there had been an attempt to tell a story that would last all year. A similar attempt was mounted in 1986 – like the Key to Time series, *The Trial of a Time Lord* [see Volume 42] can be sub-divided, but it had an even stronger linking theme, with scenes in the courtroom interspersed throughout.

It's only the final Key to Time story – *The Armageddon Factor* [1979 – see Volume 30] – that spent much time exploring the series' overarching theme. The other five, were much more in the mould of traditional *Doctor Who* stories. *The Ribos Operation*

works as a self-contained story, while still being a intriguing opener for a series that would see a strong mix of new and old writers... ■

Below:
The Keys of Marinus
also featured
a 'quest'.



PART ONE

The Doctor has just finished building a new K9 when he is called outside by the White Guardian. [1] The Guardian tells him he must recover the six segments of the Key to Time to restore the balance of the universe. He tells the Doctor to “beware the Black Guardian”.

The Doctor meets his new assistant; a young Time Lady called Romanadvoratrelundar. [2] She has a tracer which can be plugged into the console to give them the coordinates of each segment. Once each piece is located, the tracer will convert it into its true form.

A criminal called Garron and his subordinate Unstoffs are on the roof of a snow-covered building. [3] It is the home of the crown jewels of the planet Ribos, which are guarded by a ravenous beast. Unstoffs sends it to sleep with some drugged meat, climbs down a ladder into the relic room and cuts open the

jewel cabinet. He places a lump of jethrik crystal in the cabinet and reseals it.

The TARDIS lands on Ribos and the Doctor and Romanadvoratrelundar emerge into a backstreet. The Doctor decides to call his companion Romana to save time. [4]

Garron meets the Graff Vynda-K and his *aide-de-camp* Sholakh. Garron claims to be empowered to sell the planet. He gives them a mineralogical survey, suggesting that Ribos is rich in jethrik, the most valuable element in the galaxy!

[5] The Graff realises that he could hire an army and regain the Leviathan crown!

Garron has bugged the Graff's quarters and listens with interest.

The Doctor and Romana track the segment to the cabinet in the relic room. On the roof, Unstoffs helps a guard blow the horn to wake the beast, the Shrivenzale.

Romana is trapped in the beast's lair by a descending door. As the Doctor tries to free her, the beast awakes! [6]





PART TWO

Outside, the guard captain orders the door to be raised. The Doctor and Romana escape and hide as the guard captain enters to light the room. Garron enters, claiming to be a merchant, and asks the captain if he could place some money in the relic room, for safe keeping.

Garron shows the Graff the relic room and the Graff spots the jethrik in the cabinet. Unstoffs, pretending to be a local, claims it is from a lost mine. [1] The Doctor and Romana listen with interest; the Doctor thinks Unstoffs is a crook trying to sell a fake map.

Back in his quarters, the Graff offers Garron eight million opeks for the planet. Garron asks for a deposit of two million as a mark of good faith; the Graff says one million may be possible. Garron assures him the deposit will be guarded by the guard captain. [2]

Garron lambasts Unstoffs for endangering their con with his 'lost mine' story. They should stick to the plan; Sholakh is fetching the money, which Unstoffs will then steal. [3]

The Doctor realises that Garron must have planted the jethrik in the cabinet. [4]

The Graff and Sholakh meet Garron in the relic room and the captain locks the gold in a cabinet. The captain then seals the chamber and Garron and Unstoffs reconvene to the roof.

The Doctor sends Romana to watch them while he enters the relic room after hypnotising the guard. Unstoffs drugs the Shrivenzale, climbs down a ladder into the room and collects the jethrik and the money. [5] Then, after the Doctor walks in, he runs out. The guard wakes and sounds the alarm.

The Doctor climbs up the ladder to the roof and, with Romana's help, he 'arrests' Garron. But they walk into the Graff, who orders his soldiers to execute them! [6]

PART THREE

Garron begs for mercy and the Graff tells Sholakh to take them to their quarters for interrogation.

The captain discovers the robbery; he thinks the only thing missing is the Graff's gold – but the jethrik is gone too! [1]

An old man helps Unstoffe hide from the guards.

The captain summons a female soothsayer, called the Seeker, to help find Unstoffe. She casts her bones which reveal that he is in the concourse. [2]

Garron admits to the Doctor and Romana that he stole the jethrik and intended it to use it to entice the Graff into buying the planet. [3]

Sholakh tells his soldiers that when the native guards raid the concourse, they should shoot the lot of them. He orders a soldier called Kro to kill their prisoners when he hears the firing.

Unstoffe speaks to the old man who

saved him, Binro the Heretic. His heresy was to say that the “ice crystals” in the sky are suns. Unstoffe tells him that one day men will turn to each other and say “Binro was right”. [4]

The Doctor modifies Garron's listening device so Garron can use it to tell Unstoffe he has been traced to the concourse and should get away.

The Doctor calls K9. K9 stuns Kro, the Doctor and Romana. [5]

Unstoffe and Binro pass through the ‘Hall of the Dead’ into the catacombs.

The Doctor tells Romana to check her tracer; the jethrik is the first segment! And as Unstoffe is carrying it, they can use it to find him.

Unstoffe and Binro hear the growl of a Shrivenzale. The catacombs are full of the creatures.

The Doctor, Romana, K9 and Garron reach the Hall of the Dead. They all hide [6] as the Graff and Sholakh enter. But a skull topples to the floor, giving them away...





PART FOUR

The Doctor blows his whistle, drawing the attention of a Shrivenzale. The Graff and Sholakh wait for the creature to slither past then go to fetch the Seeker. The Doctor tells Romana and Garron to look for Unstoffe with K9 while he will go back to the city to keep an eye on the Graff. [1]

Binro offers to go back to the city and look for Garron, so Unstoffe gives him his communicator so he will be able to prove it isn't a trick.

The Doctor returns to the Graff's quarters and disguises himself with Kro's uniform. Meanwhile, Garron slips away from Romana and K9. Romana realises he has stolen her tracer! [2]

The Graff's soldiers lead the Seeker to the catacombs. The Graff and Sholakh follow – along with the disguised Doctor. The Seeker prophesies that all but one of them is doomed to die. [3]

Garron locates Unstoffe using the tracer.

The Graff's group find Binro and force him to give up Unstoffe's communicator.

The captain sets up a cannon in the Hall of the Dead, intending to seal the catacombs.

The Seeker finds Garron and Unstoffe. Binro is killed and Unstoffe returns the jethrik and the gold to the Graff.

The captain fires the cannon, causing rockfalls throughout the catacombs. Sholakh is killed. The Graff swears to avenge him. [4]

Garron and Unstoffe are trapped by a rockfall, but Romana and K9 rescue them.

Recalling the prophecy, the Graff kills the Seeker, then hands the disguised Doctor an explosive. Losing his sanity, the Graff charges away [5] and, tricked by the Doctor, is blown up by his own bomb.

The Doctor and Romana return to the TARDIS and say farewell to Garron and Unstoffe. Romana uses the tracer to transform the jethrik into the first segment of the Key. Only five more to go! [6]

Pre-production

The concept of devoting an entire series of *Doctor Who* to a single running theme was initially developed by Graham Williams in his job application to become producer of the series. Williams submitted a three-page document entitled *Doctor Who (1977 Season)* on Tuesday 30 November 1976. Beginning with a discussion about elemental physical forces, Williams suggested a fourth force of the dimension space/time, a mysterious power that holds the universe in balance. The Time Lords have a degree of control over this force but the balance is kept by even more powerful and responsible figures – two perfectly balanced forces of black and

white, good and evil, construction and destruction. The President of the High Council of Time Lords is aware of the higher authority of the Black and White Guardians, who have a power source called the Key to Time in their neutral territory – the Centre of Time. The Key is formed by six interlocking crystal segments forming a perfect cube, but an ‘agent of Black’ steals it and scatters the pieces throughout space and time. The segments must be recovered before the balance of the universe is destroyed, with the Doctor attempting to collect these across the six serials in the 26-week series. His race against time was to be marked by a ‘candle’, a bright orb which is fading as the balance falls.

Opposite:

The blue jethrik stone lies among the sacred artefacts of Ribos.

'THE SERIAL HAD THE WORKING
TITLE "OPERATION", A CON ARTIST'S
SLANG TERM FOR A CONFIDENCE TRICK.'

The six adventures would pit the Doctor against the agents of Black, and at its conclusion the Doctor would have to make his own decisions about the power of the completed Key.

Williams was appointed producer and started work in January 1977. Problems with the first script of the 1977/8 series, Terrance Dicks' *The Witch Lords* (AKA *The Vampire Mutations*) immediately occupied Williams and precluded the possibility of introducing his 'umbrella' theme at this stage. However, towards the end of his first year, Williams decided to reuse the proposal to form the basis of the 1978/9 series, and began developing the stories with script editor Anthony Read. Part of



THE RIBOS O

Above:

Romana is sent to help the Doctor find the segments of the Key to Time.

the reasoning behind Williams' theme was his dislike of the degree of coincidence in the series and he wanted the Doctor to get into situations for a reason – as well as giving him the moral purpose of a quest. The creation of the Guardians stemmed from Williams' feeling that the Time Lords had featured too frequently in recent years.

During late 1977 it was uncertain whether Louise Jameson would remain with the series as Leela, and so a new companion, Romana, was developed by Williams and Read. They decided that, given the nature of the mission, she should be a highly civilised Gallifreyan from the same background as the Doctor, but who lacked his practical experience. They wanted Romana to conflict with the Doctor, and envisaged her as a detached and frosty ice maiden – a total

contrast to Leela. A character outline was drawn up on Monday 10 October 1977. Romanadvoratrelundar (who the Doctor would call 'Romy' to annoy her) was 'an acolyte Time Lord (Time Lords still refuse to admit to an official title, Time Lady)' who was assigned to the Doctor by a 'Guardian of Time'. Romana would have knowledge not available to the Doctor during his time at the Academy, and would retain the ideals of non-intervention taught on Gallifrey. However, she would adapt quickly to her new situation. She was to be horrified by the Doctor's casting aside of the 'Codes of Practice' which she had had instilled in her. She had the earthly appearance 'of about twenty years' and it was noted that 'she may, at the end of the season, be due for her first regeneration'. Romana would slowly overcome her

upbringing to adopt new patterns of behaviour, which is why she was selected by the Guardian: 'She will, for example, eventually see the sense in the Doctor's rather biting criticisms of her wearing the full-length dress as being somewhat impractical and will, to his astonishment, hack it off above the knee to give herself more freedom of movement.' The Doctor would continue to mistrust everyone else, and so would not give Romana all the facts about the situation, and might even try to mislead her. The summary noted that 'she is, in short, the perfect foil to the Doctor in any situation throughout Time and Space'.

Key to Time format

At the start of November, Louise Jameson confirmed that she would not be continuing as Leela; Williams made an approach to Elisabeth Sladen to see if she would be interested in returning to *Doctor Who* as Sarah Jane Smith, but she declined.

The following month, the format for the Key to Time was issued to several prospective writers including Robert Holmes, Read's predecessor as script editor who had left the show in July 1977. Holmes had been asked to submit ideas for the 1978/9 series to guarantee a workable script that could start the new recording block with minimal rewriting. A requirement placed upon Holmes was that the serial should be written totally for studio with no film work, cutting down preparation time to a minimum. As the new series was to be recorded in transmission order, particular care had to be taken over lining up the scripts. A meeting of the prospective writers – Holmes, Douglas Adams, David Fisher and Ted Lewis – was held in late 1977;

Bob Baker and Dave Martin were also kept informed of the format although they had been unable to attend.

Holmes' first idea seems to have been the character of the con man, Garron, around whom he developed a storyline. This did not include the Key to Time theme but revolved around an attempt to trick a wealthy nobleman, the Graff, into parting with a fortune. Central to the con is a powerful mineral which, unknown to Garron, contains enough energy to power a space fleet. The Doctor uses local beasts called Shrivenzales to overcome the Graff and get the mineral from Garron. Anthony Read added the Key to Time elements into the storyline (principally making the mineral the first segment). With the outline finalised and accepted, Holmes was commissioned on Friday 9 December for a four-part serial entitled *The Galactic Conman*.

It had been decided, during the recording of the previous serial, *The Invasion of Time* [1978 – see page 40], to retain K9 for a further year. The robot dog's continuation in the show was confirmed after Williams was assured that the problems with the prop's noise and remote-control system could be remedied by the Visual Effects Department. Nigel Brackley, who operated K9, had originally been approached to install the radio equipment into the BBC prop when he was working at The Radio Control Model Centre in Harlington, with the dog being delivered on Saturday 5 March 1977. At the start of 1978, Brackley left the company and moved to Slough Radio Control;

Connections: Monster food

➤ The Doctor is resentful of the Time Lord President revealing personal information about him to Romana and says, "I should have thrown him to the Sontarans when I had the chance." This is a reference to the preceding adventure, *The Invasion of Time* [1978 – see page 40] in which Gallifrey was invaded by the Sontarans.



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however, he took his work with K9 with him to the new company. Slough Radio Control refitted the control system, using K9 to publicise their mechanisms and Nigel Brackley was assigned to work on the series as the robot dog's engineer. The prop's motor was now a quieter model from an electric wheelchair rather than the noisy one originally taken from a child's electric tricycle. The prop was given a coat of charcoal grey paint to distinguish it from K9 Mark I. Visual effects on the new serial were supervised by Dave Havard, who had previously worked on *Planet of Evil* [1975 – see Volume 24]. Havard fitted the prop with a suppressor to stop its radio signals interfering with the cameras and installed a new, quieter belt drive system with larger wheels. Dick Mills of the Radiophonic Workshop was assigned to the serial in March 1978 to create special sound effects for the serial.

The serial soon had the working title *Operation* – a con artist's slang term for a confidence trick. In a feature on the children's magazine programme *Blue Peter* in November 1978, an extract from the first episode was also referred to as *The Rebose File*. This was an error in the

Below:
K9 with
"mistress"
Romana.



camera script (which also referred to *The Armageddon File*), and was not a working title. The title of the finished scripts became *The Ribos Operation*.

Holmes delivered his scripts for Parts One to Three on Monday 30 January 1978, with Part Four following a week later on Monday 6 February. Holmes was pleased with his scripts since the supporting characters were strong enough to keep Tom Baker's Doctor in check, and Read also liked the tremendous style of the story. Read, with input from Williams, wrote the opening of the story that introduced the Key to Time elements, and the material establishing Romana and the Guardian. The scripts described the city of Shur on Ribos as 'a mediavel (sic) scene. Maybe Moscow in the fifteenth century'. The weapons used by the Graff Vynda-K and his Levithian Invincibles were originally described as small, handheld needle guns. Later script revisions changed these to



Unstoffe described as ‘a mud-patch in the middle of nowhere, home to him and a few hundred sheep’. The character’s origin was changed as a result of guest-star casting by the serial’s director George Spenton-Foster, an old friend of Williams’ who had directed *Image of the Fendahl* [1977 – see Volume 27] the previous year. On Monday 28 November, Spenton-Foster was booked to work on *The Ribos Operation* between Monday 30 January and Friday 26 May. Both he and Williams had worked on the BBC legal drama *Sutherland’s Law* a few years earlier and cast its star, Glaswegian Iain Cuthbertson, as Garron; Spenton-Foster had also directed Cuthbertson in *Survivors* the previous year. A Scots actor who had also starred in *The Borderers* and *Budgie*, Cuthbertson’s Garron became a Londoner from Hackney Wick. References to Garron’s sale of Sydney Harbour to an Arab were, however, retained in Part Three.

Left:

The Graff
Vynda-K
and his aide,
Sholakh.

laser spears – a more accurate description of the staff-like weapons carried by the warriors. The Levithian guards were described as having green-visored helmets, dissimilar to the metallic masks seen in the final version.

Graeme McDonald wrote to Williams about the script commenting, ‘This seems to get off to a good start provided we aren’t surrounded with polystyrene gloom and unheavy rocks at the end.’ McDonald queried the introduction of K9 Mark II and felt that the treatment of Romana needed modifying because of the ‘sexist remarks’ about ‘female assistants’ and ‘junior female acolyte’ as well as having the Academy graduate counting on her fingers. Williams replied, agreeing to most of the suggested changes but wanting to retain certain remarks as being in keeping with the Doctor’s character.

Garron was originally an Australian from a place called Bullock’s Creek which

Time Lady Romana

The *Ribos Operation* was the first serial to go into production following the UK release of the science-fiction movie blockbuster *Star Wars* at the end of December 1977. Tom Baker, Graham Williams and Anthony Read had attended an early screening of the film at the Dominion on Tottenham Court Road; Williams in particular was concerned by the high standards of special effects which the movie set and which the audience may now come to expect with the genre.

The production team assembled for *The Ribos Operation* included set designer Ken Ledsham (replacing Tony Thorpe who was originally assigned to the serial), make-up supervisor Christine Walmesley-Cotham (replacing Ann Briggs), and costume designer June Hudson – all newcomers to *Doctor Who*. To design the sets for Shur,

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Ledsham used Sergei Eisenstein's film *Ivan the Terrible* (1945-58) as a reference for the look of 'Holy Russia'; the Russian image was something which George Spenton-Foster in particular wanted to exploit.

The new companion was announced by the *Daily Mail* on Saturday 21 January 1978 during the broadcast of *Underworld* [1978 – see page 6]; *Dr Who's quest for a blonde* indicated that a 'blonde supergirl' was being sought to play 'Romana, like Dr Who a Time Lord, or rather a Time Lady. She will be allocated to the Dr [sic] – against his wishes – to help in the quest for the Key to Time. In the opening episode, Dr Who criticises her long, flowing dress, so Romana hacks it into a ragged mini,' Graham Williams said that Romana would be "youthful and impetuous with an earthly appearance of about 20 years". Around 3,000 actors applied for the part of Romana, from which around 600 were selected and narrowed down to about 120 interviewees. Williams was keen to find somebody with the classic beauty of Grace Kelly and was initially disappointed by the actors he interviewed,

but soon found what he wanted in Mary Tamm.

Tamm was on the shortlist of four actors reading for Williams and Spenton-Foster in a screen test with Baker held on the afternoon of Tuesday 14 February. Six girls were seen, including Mary Tamm and Belinda Mayne. The scene for the test involved each hopeful running in and performing a short scene with Baker. As it was Valentine's Day, Baker presented each actress with a rose. Tamm was uneasy when Spenton-Foster asked her to

Right:

Garron keeps in touch with Unstoffee by wrist communicator.

Connections: Russian influence

▶ Ribos was intentionally based on sixteenth-century Russia. The local currency is the 'opek', which sounds similar to the Russian 'kopek' (100 of which make a rouble). OPEC is also the acronym of the Organization of the Petroleum Exporting Countries. Ribos is an anagram of the common Russian name 'Boris'.



play her audition in a very intimate manner with Baker, sitting on his knee and stroking his hair. When she refused, she feared that she had lost the role. However, Spenton-Foster was particularly keen to cast Tamm, who was especially attracted to the part when Williams and Read assured her that Romana would be the first companion to be the intellectual equal of the Doctor and not just scream and be rescued. After accepting the role, Tamm decided to only stay with the series for a year.

Mary Tamm

One of Tamm's old friends from RADA had been Louise Jameson, and so she was warned in advance about the pros and cons of working as the companion on *Doctor Who*. On Friday 13 January she had married Lloyd's underwriter Marcus Ringrose quietly at a ceremony in Kensington and had only just returned from a honeymoon in the Canary Islands when her agent told her about the approach from George Spenton-Foster. Recalling some of the William Hartnell episodes of the series (and having seen some of Louise Jameson's recent appearances), Tamm was reluctant to take on a TV contract, but her agent Irene



Dawkins indicated that this would be good exposure with a strong role. It also meant that she would be able to be based in London for the first year of her marriage.

Tamm was presented to the press at a champagne celebration photocall (the Golden Jubilee champagne being left over from her wedding) on the evening of Friday 17 February, where Williams explained how the 120-year-old Romana had just left finishing school and would be an undergraduate Time Lord helping to search for the Key to Time in the new season's quest.

Many newspapers carried the story the following day. The *Daily Mail* carried *A new girl (A mere slip at 120 years old) for Dr Who* while Richard Last of *The Daily Telegraph* reported on the previous day's casting of *Dr Who's Time Lady*. Ross Benson reported on *Dr Who's Space Mate* on the front page of the *Daily Express* while a pin-up shot of Mary Tamm appeared in Tony Pratt's *Wow! Who's a lucky doc...* in the *Daily Mirror*. *The Guardian* ran a photo of Mary Tamm whose casting was also covered briefly

by *The Times* in the small item *New 'Dr Who' girl*. On Sunday 19 *The Sunday Express* also featured the actor, discussing her marriage the previous month.

Tamm's casting was also reported by *Television Today* on Thursday 23 February.

Tom Baker invited his new leading lady out for a drink in Soho prior to rehearsals on the new series. Unfortunately, on that day Mary Tamm was suffering from a bad migraine and was not really able to drink, so was worried that he would think she was boring. Baker then offered a lunch instead, but Tamm was so ill that she was forced to decline.

Tamm's first costume fitting was on Sunday 19 March and the following day she was formally offered her first contract as Romana – covering the first two serials of the 1978/9 series. A second fitting then took place on Thursday 23 March.

Among the main props required for the 1978/9 series were the component segments of the Key to Time itself. Dave Havard constructed these from clear resin, based on a small wooden puzzle shown to him by Williams. Several different versions were made – *The Ribos Operation* Part One briefly featured one of the two completed cubes, and one of the six separate segments appeared in the closing scene of Part Four. These segments did actually build up into a complete cube. Another significant prop was the tracer/core of the Key (referred to as the candle in the outline), an illuminating prop powered by a battery pack hidden in the user's costume.

Rewrites for various sequences were made on Monday 20 February, including the initial TARDIS scene between the Doctor and Romana, Unstoffs attempt

Connections: Trickster

▶ The Doctor claims to have learned his sleight of hand skills from John Nevil Maskelyne (1839-1917), a Victorian stage magician (and also inventor of the pay toilet).



Left:

The Doctor's new companion decides she'd like to be referred to as 'Fred'.

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Above:
Partners
in crime –
Unstoffs
and Garron.

to sell the Graff the map, Binro meeting Unstoffs on the concourse and Part Three's cliffhanger. During some of the rewrites, the spelling of the mineral jethrik became 'jethrick', although it reverted to the former spelling in publicity material. The script described the nugget as 'an irregularly shaped hunk of mineral, a shining inky blue thinly veined with silver'.

Williams took a holiday in late February and on his return met with his superior, Graeme McDonald, on Tuesday 7 March to discuss the new direction of the show, particularly with respect to *The Invasion of Time*, which McDonald felt was too humorous. On Tuesday 14 March, McDonald expressed his concerns about *The Ribos Operation* in a memo. The main problem seemed to be that Romana was not set up strongly enough in her debut serial.

Rehearsals for the first studio block took place at the BBC's Acton Rehearsal Rooms and ran from Thursday 30 March to Saturday 8 April. Cast as Unstoffs was Nigel Plaskitt, an actor who also worked as a puppet voice artist on the ATV children's show *Pipkins*, and indeed used a variation on his 'tortoise' voice during the scene in Part Two where Unstoffs posed as a shrieve; Spenton-Foster had spotted Plaskitt during his appearances as Malcolm in commercials for Vicks Sinex made since 1972. Paul Seed, who played the Graff Vynda-K, later became a director after a recommendation by Williams and worked on the acclaimed *House of Cards*; Spenton-Foster had directed him in *Survivors* during 1977. Robert Keegan, playing Sholakh, had appeared regularly in

Z Cars (plus its spin-off *Softly, Softly*), *The First Lady* and *Oh No It's Selwyn Froggitt*. Timothy Bateson, who removed his false teeth to play Binro, had an extensive stage career and had previously starred in the BBC series *The Adventures of Peter Simple*, and had appeared in classic serials such as *Bleak House* and *Barnaby Rudge*, the Yorkshire sitcom *Shine a Light* and LWT's *Both Ends Meet*.

Principal cast

Two of the principal cast had featured in *Doctor Who* before. Prentis Hancock, now playing the Captain of Shrievalty, had been a reporter in *Spearhead from Space* [1970 – see Volume 15], Vaber in *Planet of the Daleks* [1973 – see Volume 20] and Salamar in *Planet of Evil* [1975 – see Volume 24]; Spenton-Foster had worked with him during 1977 on *Survivors*. Cast as the Seeker was Ann Tirard, who had featured as Locusta in *The Romans* [1965 – see Volume 4]; she had since appeared in Granada's *Rogues' Gallery*. The role of the Seeker was originally written for a man but changed in later drafts. Oliver Maguire, cast as one of the Shrieves, had been directed by Spenton-Foster before in *Thirty-Minute Theatre* and *Paul Temple*; his colleague John Hamill had similarly worked with the director on *Paul Temple*.

Tamm was very keen to understand all the 'bafflegab' in her dialogue. She was immediately disappointed that the script had Romana acting as the Doctor's foil and being rescued at the first cliffhanger. Some of the explanatory dialogue was amended to show Romana deducing what was happening in Part Three. In terms of working with Tom Baker, Tamm had been warned by her old friend and predecessor Louise Jameson that the show's star could be difficult to work with, and one of the

reasons that she had left the series. The first time that Baker attempted to establish his position by being rude to her, Tamm responded quickly by being rude back and standing up to him. This broke the ice and the two discovered that they shared a very similar sense of humour. The pair also enjoyed doing the daily crossword in *The Times*, as did John Leeson. The new arrival on the series was deeply impressed with the casting of Iain Cuthbertson, but suffered some discomfort during production, having sprained her right wrist in a fall while climbing the stairs to her attic at home.

As usual, Baker vented his frustrations on the script during rehearsals, referring to it as "horse s**t".

Since the conclusion of work on *The Invasion of Time* in December 1977, Baker had done further signings at venues such as Stirling and Glasgow on Saturday 25 March and Derby on Tuesday 28 March. At this time, Baker was actively trying to raise finances for his movie project *Doctor Who Meets Scratchman* which he hoped would enter production at the end of the year. Over the break from *Doctor Who*,

Below:

The Graff ponders how to rebuild his fortune.



Connections: Heretical science

Binro, who deduced the existence of stars beyond Ribos' own sun and is condemned as a heretic by the religious authorities, is loosely based on pioneering astronomers Copernicus (1473-1543) and Galileo (1564-1642). Galileo was branded a heretic, and was forced to recant his beliefs when threatened with torture in 1633.



Below:
Designing
Romana's severe
and elegant look.

John Leeson had worked on *Mission to Destiny*, an episode of BBC1's new science-fiction adventure *Blake's 7* with filming in the first week of January 1978 and recording on Thursday 19 and Friday 20 January; this aired on Monday 13 February. He had also provided K9's voice for a recording of *Jim'll Fix It* at Television Theatre on Wednesday 25 January.

Instructed to give Romana a look which was both severe and elegant, June Hudson gave her a multi-layered white dress in jersey material,

and borrowed an expensive, floor-length white feather cloak from a friend. Baker retained the same basic costume he had worn in *The Invasion of Time*, but with a

longer scarf which was the remainder of his original scarf and its duplicate sewn together. The Seeker's headdress was inspired by the mythical figure of Herne the Hunter.

Christine Walmesley-Cotham applied a scar to the right side of Robert Keegan's face, some of Timothy Bateson's teeth were treated to make them appear broken and Ann Tirard underwent extensive face-painting as the white-faced Seeker.

The opening scenes described the Guardian as looking like a 'colonial overlord'. The front paw of the Shrivenzale was 'a wrinkled claw like that of some gigantic turkey' and in Part Two it emitted 'a river-boat shriek of disappointment'.

Various lines of Holmes' script were changed before recording, including a couple of the Doctor's comments about his new companion's name. The Doctor's original response to Romana's line, "My





Left:
The Seeker
of Ribos.

name is Romanadvoratrelundar,” was, “That’s your misfortune,” while his later comment on leaving the TARDIS was, “You sound like a Siamese railway station.” The script originally had the Doctor calling Romana “girl” when he was displeased with her; this patronising aspect was dropped early on.

The start of Part Three, in which the Doctor confronts the Graff, was reworked in rehearsals. Originally, the Doctor steps forwards to stop the Graff striking Garron across the face and comments, “Manners... You wouldn’t think he was a High of anything, would you, Romana?” This was replaced by an ad-lib from Baker in which the bemused Doctor was slapped across the face with a glove and returned the gesture. Similarly, the conversation between the Doctor, Romana and Garron as they hide at the start of Part Four was reworked to inject more humour.

Part Four underwent significant restructuring shortly before recording. Originally after the rockfall that kills Sholakh, the Graff drove the Seeker away, forcing her to leave the catacombs. As the Seeker emerged from the catacomb entrance into the Hall of the Dead, the Captain lit the fuse of the cannon to seal

the caves. The explosion blasted into the mouth of the catacomb where the Graff was knocked over. He rose to find the Seeker blown back into the tunnels, broken and bleeding. The Graff was now quite mad, and believed that the twisted body of his final guard lying nearby must be dead. He recalled the prophecy that all but one of them were doomed to die. Taking his dagger, he cut the guard’s ammunition pouch from his body and staggered away up the chamber, reliving his past glories. The Doctor removed his helmet as there was a tremendous explosion from the passage... and a tinkle of gold opeks showered around him. This was changed to a sequence in which the Graff gunned down the Seeker with a laser spear and then handed the Doctor/guard a thermite pack so that he could perform a final act of suicide to ensure that the prophecy came true in Vynda-K’s favour. The shot of the Captain firing the cannon was moved back in the completed programme to increase the impact of the rockfall.

Deleted scenes

In deleted scenes from the script, Unstoffs’s radio call sign was ‘Hunter’ while at one point Garron used ‘an appalling London accent’. The minor character of a ‘carter’ was removed from Part One – presumably the owner of the cart on which Unstoffe hid the drugged shrieve. When hiding behind the screen in Part Two, Romana was originally worried about sneezing and she and the Doctor slipped out when the Shrieves were distracted by a local. In Part Three, Romana’s age was given as 140 (as in her character outline). Holmes’ scripts had the Doctor claiming that he was trained by the Victorian theatre magician John Nevil Maskelyne. ■

'THE TOWER ROOF WAS A RAISED SET,
ACCOMMODATING A SHALLOW TUNNEL TO
ACT AS THE SHAFT DOWN TO THE
SHRIVENZALE'S LAIR.'

Production

The first of the two three-day recording sessions took place in TC4 from Sunday 9 with recording taking place in the evening from 7.30pm to 10pm. Almost at once the production was hit by a technical dispute over who should be responsible for the burning torches to be used in the serial – the fire officer or the scenery crew. An hour of recording time was lost while Williams settled the matter. The first scenes recorded covered those for the first three episodes in the connected sets of the relic room, the area outside it and the adjacent shaft housing the Shrivenzale. Because there were many short intercutting scenes, recording was almost continuous with consecutive scenes played on different sets. The lights in the relic room were changed from burning torches to electric lights that ‘magically’ dimmed or illuminated when pointed to by a Shrieve’s staff. The safe used in Parts Two and Three had a hollow back to allow a camera view from inside it. The safe key did not fit the prop, a fact which Nigel

Plaskitt, playing Unstoffs, obscured with his hand.

Romana’s white dress was crafted by the same seamstress who made Cilla Black’s dresses, with input from Mary Tamm on the design; Tamm’s clairvoyant had told her not to have the colours red, blue or purple in the costume, so white was a suitable choice. Made of a heavy jersey material, it stretched during the hot studio sessions until it caught on Tamm’s feet. Consequently, there were several copies for Tamm to change into, and the



Above:
The
Shrivenzale
awakes...

Right:
Fur coats are
all the rage
on Ribos.

stretched ones were then shrunk back in cold water. The dazzling white outfit did not find favour with Baker and the original idea of having Romana always dressed in white was subsequently abandoned. Neither Baker nor Tamm enjoyed using the awkward tracer prop; this housed a quartz light and on the first recording session required the holder to be wired up to a power source. It was modified for the second block to use a simpler battery which could be hidden in the costume of the actor carrying it.

The Shrivenzale was described in Holmes' script as 'a thing of scales and claws, not unlike a crocodile with a pair of forward-reaching pincers'. The creature was made by visual effects designer Dave Havard and assistant Steve Drewett in the space of three weeks; the bony crest was a late addition to counterweight the jaws. The heavy costume was worn by two stuntmen – Nick Wilkinson operated the front paws and Stuart Fell was in the rear to move the hind legs. Wilkinson and Fell communicated with short wave

radio and the creature was sometimes mounted on a trolley for shots where it needed to move. The outfit was very constricting, and air only found its way in when Wilkinson opened the creature's mouth by pulling back the neck section. The eyelid was operated by Fell and was based on the same principle as a motorcycle brake mechanism.

On Monday 10 April, and for all remaining studio days on the serial, an afternoon recording took place from 2.30pm to 5.30pm in addition to the evening recording. Scenes recorded on this day started with the tower roof featured in Parts One and Two. This was a raised set, accommodating a shallow tunnel to act as the shaft down to the Shrivenzale's lair. Artificial snow was used for some of these sequences and also for scenes at the city wall and concourse. The next scenes to be recorded were those in the connecting sets of the Graff Vynda-K's room and the passage outside it. The Graff's room was enhanced by an alcove foreground vignette used in some establishing shots. The line "right sir" was given to one of the walk-on guards – Pat Gorman, who played Kro –





and by virtue of speaking these two words raised his salary. To save having to line up camera shots for post-production, the stunning of Kro by K9 was performed off-camera. This second day in studio included a BBC publicity session with photos taken of the Doctor and his new companion on the roof set and outside the repainted TARDIS prop.

Off-camera action

The first block concluded with scenes set at the city wall for all four episodes, and then the scenes on the concourse and the corner door leading to the Hall of the Dead for Parts Three and Four. The TARDIS' materialisation in Part One was achieved using the roll-back-and-mix technique, and shortly afterwards a recording break was scheduled to allow Baker to be hoisted into the air in a net as, off-screen, the Doctor walks into a wild animal trap. For the scene in Part Three where K9 emerges from the TARDIS, the prop was unable to be driven fully out of the ship, and likewise its entry into the vessel at the end of Part Four was suggested off-camera. The TARDIS departed Ribos with another roll-back-and-mix shot. As used in the concourse scenes, the laser spears carried by the Levithians were working props with

illuminating clear crystals attached to the end. As with K9's stunning of Kro, the impact of the beam and the death of the shrieve was achieved off-camera.

Rehearsals for the second recording block took place at Acton from Thursday 13 April through to Saturday 22 April. Joining the cast was Cyril Luckham, star of *The Adventurers*, *Ryan International* and *The Guardians*, playing the White Guardian; he had also featured in BBC serials such as *No Cloak – No Dagger*, the BBC Scotland thriller *Scotch on the Rocks* and the acclaimed BBC2 production of *The Forsyte Saga*.

During one lunchtime visit to the Castle Hotel near the Acton rehearsal rooms, Tom Baker was bitten by Paul Seed's dog, George, a Jack Russell Terrier, leaving him with a deep wound on the left side of his upper lip. This was the result of

Connections: Time Lord years

▶ Romana tells the Doctor that she is nearly 140 years old, a comparative youngster compared to the Doctor's age, which he gives as 756, although Romana believes that he is actually 759.



Left and below:

Tom Baker (with plastered lip) and Mary Tamm pose inside the TARDIS.



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an accident which occurred when Baker attempted to get George to perform his party piece: taking a sausage out of somebody's mouth. Plaskitt took Baker over to Central Middlesex Hospital for medical attention. It was decided to use heavy make-up to disguise the cut as much as possible, which caused Baker great discomfort.

The second studio recording session in TC4 ran from Sunday 23 to Tuesday 25 April and was also hit by technical problems. Floor technicians argued over who should operate moveable coloured CSO screens and a roller caption machine. As a result many CSO shots – including the limbo area of the White Guardian and a split-screen effect to show a giant Shrivenzale attacking the Graff's men in the catacombs – had to be dropped.

Hall of the Dead

The first two days were spent on all the scenes in the underground tunnels and the Hall of the Dead for Parts Three and Four. These were connected sets forming five distinct catacomb areas, a cave area and the Hall itself, with Spenton-Foster again electing to use the sets in the order that the scenes would appear on screen. To make the Hall set seem even more impressive with its

dozens of lighted candles, the director used a soft focus on the camera – this also helped to hide the Doctor's face in Part Three. Camera positioning and the shadowy nature of the catacombs meant that Baker's scar could be hidden effectively for many of the scenes, and in shots such as the cliffhanger to Part Three, the lower part

Connections: Examine results

▶ Romana attended the Time Lord academy where she achieved "a triple first", a rather more impressive mark than the

Doctor's "fifty-one per cent on the second attempt".



of his face was obscured. Many of the later scenes to be recorded in the catacombs fortunately required the Doctor to be wearing Kro's mask.

As the fragile cave roof collapsed in Part Four, a special effects box was used to drop debris in front of the cameras, which were shaken to indicate the turmoil. The cannon in the Hall of the Dead had a working fuse and fired a flash charge when blasting at the catacomb entrance. A roll-back-and-mix effect was used to suggest K9 dissolving the wall of rubble trapping Garron and Unstoffs, and another small explosion was triggered to indicate the off-screen death of the Graff Vynda-K. The second day of the session was attended by a BBC photographer to take publicity shots of the Seeker, the Shrivenzale and Romana with K9.

During recording on Tuesday 25, a caption slide feed mechanism kept jamming which meant that 10 attempts



had to be made to record one sequence. Williams complained about this the next day, quipping that the machine was “the new *Doctor Who* monster”.

The final day was set aside for the scenes in the TARDIS and in the Guardian’s domain. A model shot of the TARDIS swirling past a backdrop of stars was to have been inserted as the TARDIS changed course for Ribos in Part One but was abandoned. Recording in the TARDIS was actually out of sequence. The scene involving the argument over the Doctor’s age in Part One was taped first, followed by the final sequence in which the jethrik is converted into the first segment – using

a roll-back-and-mix between the nugget and the crystal. Since *The Invasion of Time*, the console had undergone minor refurbishment, and a hole was added to one of the six console fascias into which the core could be plugged to locate each segment. The first three scenes of the serial were then recorded in sequence, with the Guardian’s domain referred to as ‘Limbo’ in the scripts. This scheduling allowed Tamm’s hair to be restyled into a more ornate look for her first scene while the sequences with Baker and Luckham were recorded. In the Limbo domain, a roll-back-and-mix effect was used to make the Guardian and his chair appear and vanish. This sequence was recorded twice, along with a cutaway shot of the completed Key cube rotating against a CSO background. The opening and closing credits for all four episodes were recorded at the end of the final day.

Two photocalls for the press to meet Tamm and Baker (with a plaster over his lip) were held on this final day – one on the TARDIS set and another with the TARDIS prop in the grounds of Television Centre. A shot of Romana and K9 in the TARDIS appeared in *The Daily Telegraph* on Wednesday 26 April, while the *Daily Mirror* carried a shot of Tamm and Baker under the title *Who’s in luck*. Tony Pratt of the *Daily Mirror* ran a major feature about the Doctor’s companions entitled *Who’d Be A Dr Who Girl?* on Friday 28 April; this featured comments from most of the actresses who had played the Doctor’s companions since 1963. ■

Left:
Snow falls
on Ribos.

PRODUCTION

Sun 9 Apr 78 Television Centre

Studio 4: Relic Room, Landing,
Shaft

Mon 10 Apr 78 Television Centre Studio

4: Tower Roof, Vynda-K’s Room,
Passage, Landing

Tue 11 Apr 78 Television Centre

Studio 4: City Wall, Concourse,
Corner Door

Mon 24 Apr 78 Television Centre

Studio 4: Hall of the Dead, Catacombs (A, B,
C, D and E), Caves

Tue 25 Apr 78 Television Centre Studio

4: TARDIS, Limbo

Post-production

A gallery-only day for electronic effects on the serial was arranged for Wednesday 3 May from 2pm to 6pm in TC3. A gallery-only session was held in TC3 to add video effects. These comprised of superimposing the CSOed Key in Part One, adding K9's red stun ray in Part Three, superimposing a green beam from the Graff's laser spear in Part Four and K9's red dissolving ray in the final episode. A red glow was also superimposed over the shot of the jethrik being transformed into the first segment. Editing took place between Thursday 4 and Thursday 11 May; first edits were broadcast of all four episodes.

Dudley Simpson was commissioned to provide the incidental music on Thursday 11 May. Music recording with a nine-piece orchestra took place at Lime Grove Studios on Thursday 25 May for Parts One and Two and either Wednesday 31 May or Thursday 1 June for Parts Three and Four. Heavy use was made of church organ music, played by Leslie Pearson who had also provided the organ music for *The Deadly Assassin*, for the scenes in which the Guardian summons the Doctor in Part One and also for certain ceremonial scenes in the relic room. A few electronic overtones were added by the Radiophonic Workshop. Over 21 minutes of music was recorded in total. A 1976 LP *Gesänge zu Marienfesten* (*Chants for the Feasts of Mary*) published by Archiv (2533310) offered various items recorded between Thursday 24 to Saturday 26 April 1975 by the Schola Cantorum Francesco Coradini Arezzo conducted by Fosco Corti. This

offered material from *Propria Missarum* (heard in Episode 2) and *Antiphonae Mariae* (heard in Episode 3). The story also called for many specific sound effects such as the curfew bell heard throughout Shur (a recording made in St Peter's Square, Venice), light mountainside bells for the Guardian's limbo, Shrivenzale roars, the noise of past battles of the insane Graff and the echoing of character voices for scenes in the catacombs for Parts Three and Four.

Dubbing had been planned to take place from Wednesday 7 June to Saturday 1 July, but actually took place on Sunday 18 and Saturday 24 June, and Sunday 2 and Wednesday 12 July.

All four episodes had to be cut to fit the 25-minute time slot. Part One overran the most, and although cut in 17 places still slightly overran the time limit. The first cut came at the very start of the serial with the TARDIS scene, which began with

Right:

The galactic swindler.





the Doctor contemplating his holiday on Halargon Three alone, and then blowing his dog whistle. He was delighted when (the new) K9 entered the control room, hence his comment, “It works!” This also served to introduce viewers to the concept of the Doctor’s new means of summoning K9 which was to play a major role in Part Three.

The Doctor and Romana

The first scene in the TARDIS between the Doctor and Romana had no less than five cuts. As K9 backed away from Romana, the Doctor assured the dog that she was harmless. The new arrival then commented that the Time Lords had warned her that the Doctor was eccentric and very iconoclastic. Romana also mentions how she had been allowed to study the Doctor’s bio-data record before she accepted the assignment – referring

to the data extracts Robert Holmes had introduced in *The Deadly Assassin* [1976 – see Volume 26]. As the Doctor examined the tracer he held it upside down. When Romana pointed this error out to him, the Doctor covered up his ignorance by claiming he was applying “reverse thinking”, allowing him to see the essential form of an object more dearly.

The scene continued with dialogue which emphasised that only the Doctor knew of the Guardian’s involvement in their mission and hence the full secret. The Doctor commented that their task was too secret even for a junior female acolyte with a triple first. The final cut was an exchange in which the Doctor, considering the tracer, said that his old friend Merlin would have liked such a magic wand.

The beginning of a scene on the tower roof in which Garron and Unstoffs discussed how effectively the Shrivenszale was drugged was cut, and the conversation

Above:
Things get cosy in the catacombs.



Above: Unstoffer meets Binro the Heretic, and tells him the truth about the stars.

between Garron and Unstoffer as the latter worked in the relic room was trimmed to a minimum. In this scene, Garron commented on the Graff's indiscreet arrival on Ribos in a four-point rocket ship on full retro thrust. Garron emphasised that from that point on, he and Unstoffer should not be seen together. Following this, two short scenes were completely cut. The first showed Garron hiding from two Shrieves as he waited near the city wall for the Graff as he was out after curfew, and the second was Unstoffer emerging from the shaft on the tower roof. The start of the scene in which Garron welcomed the Graff to Ribos was removed – here it was made clear that the Graff had never met this “representative” of the Magellanic Mining Conglomerate before.

The end of the scene in which the Graff speculated on what he could do with the jethrik was cut, as were the Doctor's comments to Romana about what the

locals would do to them if they were caught in the relic room. The bulk of the scene in which Unstoffer met the Shrieve on the roof was also removed, with Unstoffer explaining how he was a trapper returning from the tundra each dawn, offering the shrieve his homemade firewater.

Part Two was cut in 10 places. During the first encounter between the Captain and Garron, the Captain commented on the hazardous nature of trading in the north but his interest in its financial rewards alerted Garron to the fact that he was susceptible to bribery. After the Doctor and Romana slipped out of the relic room onto the landing, a brief scene of them following Garron (who the Doctor suspected was a thief) was cut as was another, longer, scene between the duo; shortly afterwards. Set in a nearby passage, the pair hid as Garron conducted the Graff's party to “pay their respects to the holy relics of Ribos”, with Garron

explaining how the wearer of the 3,000-year old Great Crown of Ribos apparently had the powers to call up the sun again at the end of each icetime. The pair also smelled something which the Doctor deduced came from the central cooking area, later revealed to be the concourse.

The start of the sequence in which Garron reprimanded Unstoffe was removed, and Unstoffe's hiding of the drugged Shrieve beneath furs on a cart was omitted. Two short scenes of the Captain impatiently waiting for Garron to bring the money before curfew were removed, as was a sequence of the Doctor and Romana lying in wait for the con-men on the tower roof. The scene of the Doctor hypnotising the Shrieve was shortened, with the guard explaining that he had been asleep all day and was not tired now – much to the Doctor's irritation.

Part Three had only three cuts. The first came as Sholakh interrogated the Doctor,

warning him how the Graff got on badly with thieves by citing how he executed all the natives of a province on the Sinian campaign when a crate of army rations was stolen. A couple of lines of dialogue in which a curious Romana asked Garron why he failed to feel remorse for his crimes were cut, and the end of the final concourse scene was removed, deleting the Captain's warnings to the Graff about the catacombs and how nobody who had ventured beyond the Hall of the Dead had ever been seen again.

Editing and dubbing

The final episode was edited in six places. The end of the first scene between Unstoffe and Binro, in which the childish nature of the conflict for the jethrik was discussed, was removed, as was the end of the Hall of the Dead scene in which Sholakh chided the Levithian Invincibles as they balked at entering the catacombs. Two scenes of Romana and K9 lost in the catacombs were completely removed, with Romana scolding K9 for being frightened of the Shrivenzale. Two cuts were then made to the scene in which the Graff attempted to execute Garron and Unstoffe.

Part One was dubbed on Saturday 6 May, with Part Two dubbed the following day. During the following week, Part Three was dubbed on Wednesday 10 and the final episode on Thursday 11. A different reprise for Part Three was used from the final take used on Part Two, with the last part of the cliffhanger itself effectively omitted. At the start of Part Four, the intercutting of camera shots also differed from those seen at the end of the previous instalment – shots of the Doctor blowing his dog whistle to summon a nearby Shrivenzale were inserted into the reprise. ■

Left:
The Doctor
dons a disguise.



Publicity

Right:

The Doctor in a thoughtful mood.

Below:

Mary Tamm was interviewed in the *Daily Express* on the day the new series launched.

▶ The Drama Early Warning Synopsis for the serial was issued on Tuesday 4 April. The promotional material for *The Ribos Operation* listed the selling points as being the first serial in a new run of the longest running 'science adventure series in the world', the Doctor and K9 embarking on the quest for the Key to Time, Mary Tamm's introduction and guest star Iain Cuthbertson.

▶ Publicity for the 1978/9 series got underway in late August, with Tom Baker and Mary Tamm taking time out to discuss the series on *Pete Murray's Open House* on Radio 2 on



Tuesday 29. On Thursday 31 August, the autumn season edition of *Radio Times* highlighted the show with a major colour feature entitled *Who's Girls* in which Liz Hodgkinson took a look at some of the past female companions. The credit listing for Part One had a photograph of the Doctor and Romana, while Part Two's was accompanied by a full-length shot of Romana on her own. The new series was previewed with a 38-second trailer screened immediately after a repeat of Part Four of *The Sun Makers* [1977 – see Volume 27] at 7.10pm on Thursday 31 August and then again at 7.20pm the following evening. Beginning with a special graphic of the *Doctor Who* logo in space reforming into the words BBC1, this showed a rapid selection of 14 clips from both *The Ribos Operation* and *The Pirate Planet*.

▶ On the day of the new series' début, Adella Lithman's interview with Mary Tamm appeared in the *Daily Express* under the title *Tamm's a Big-Time Lady...* in which Romana's equality to the Doctor was emphasised. In the *Daily Mirror*, Tony Pratt's chat with the actress appeared under the title *Mary has no love for Dr Who*, the title of which referred to the lack of romance between Romana and the Doctor.



Broadcast

- ▶ Part One of *The Ribos Operation* aired at 5.44pm on Saturday 2 September and ran for four weeks on BBC1; it was allocated an earlier slot than usual to allow for coverage of the European Athletics Championships at 6.10pm. Over the summer, its usual slot had been taken by the American superhero adventure series *The New Adventures of Wonder Woman*.
- ▶ On the day of Part One's transmission, Tom Baker made an appearance at Chalfont St Giles while Mary Tamm was undertaking similar duties at a fundraiser for a London hospital.
- ▶ A caption slide showing the Doctor and Romana appeared at the end of Part One to promote the *Doctor Who* Exhibitions at Blackpool and Longleat; these were also mentioned over the closing credits of Part Two. The same caption was used after Part Four to promote *The Pirate Planet*.
- ▶ *The Daily Telegraph's* Richard Last commented on Part One of *The Ribos Operation* on Monday 4 September,



saying he was glad that the Doctor had got his comeuppance from Romana. Jennifer Lovelace looked in on the series when reviewing the week's TV in *Television Today* on Thursday 7; she felt that unlike many other long-running series, *Doctor Who* 'maintains its standards' and felt that George Spenton-Foster's direction was 'intelligent with a thoughtful attention to detail'. On Saturday 16 September, Keith Baker of *The Belfast Telegraph* was less impressed with Romana, and also commented on Iain Cuthbertson's guest appearance.

- ▶ For the second week of the new series, *Doctor Who* returned to its usual slot of 6.20pm, with the 5.25pm slot taken by a new Noel Edmonds series called *Lucky Numbers*. Each week, the

Above:

Romana is a good match for the Doctor.

Left:

Are you warm enough, Garron?

THE RIBOS OPERATION

STORY 98

Right:
The Doctor's
new companion
was introduced
to viewers in
Radio Times.

programme featured a mystery guest that viewers had to identify, and in the live edition broadcast immediately prior to Part Three of *The Ribos Operation*, the guest was Mary Tamm. Part Three was broadcast 10 minutes later than usual to fit around the BBC's coverage of *The Last Night of the Proms*, while Part Four was mistakenly given a 20-minute slot which it overran.

- Opposition during the first week was a networking of the espionage game show *The Masterspy* and athletics coverage from LWT, which was also networked against Part Three in all areas except Southern which screened *The Life and Times of Grizzly Adams*. Parts Two and Four of *The Ribos Operation* were pitched against American imports such as *The Bionic Woman* (Granada, Yorkshire, HTV), *The Six Million Dollar Man* (Tyne Tees, HTV, Border TVHTV), *Happy Days* (Westward, Channel) and *The Life and Times of Grizzly Adams* (LWT, Southern, Anglia, Scottish, Grampian, Ulster, ATV) in most areas while ATV scheduled *The Masterspy* against Part Two.
- An Audience Research Report published on Friday 3 November sampled views from 162 people, most of whom had seen more than half the



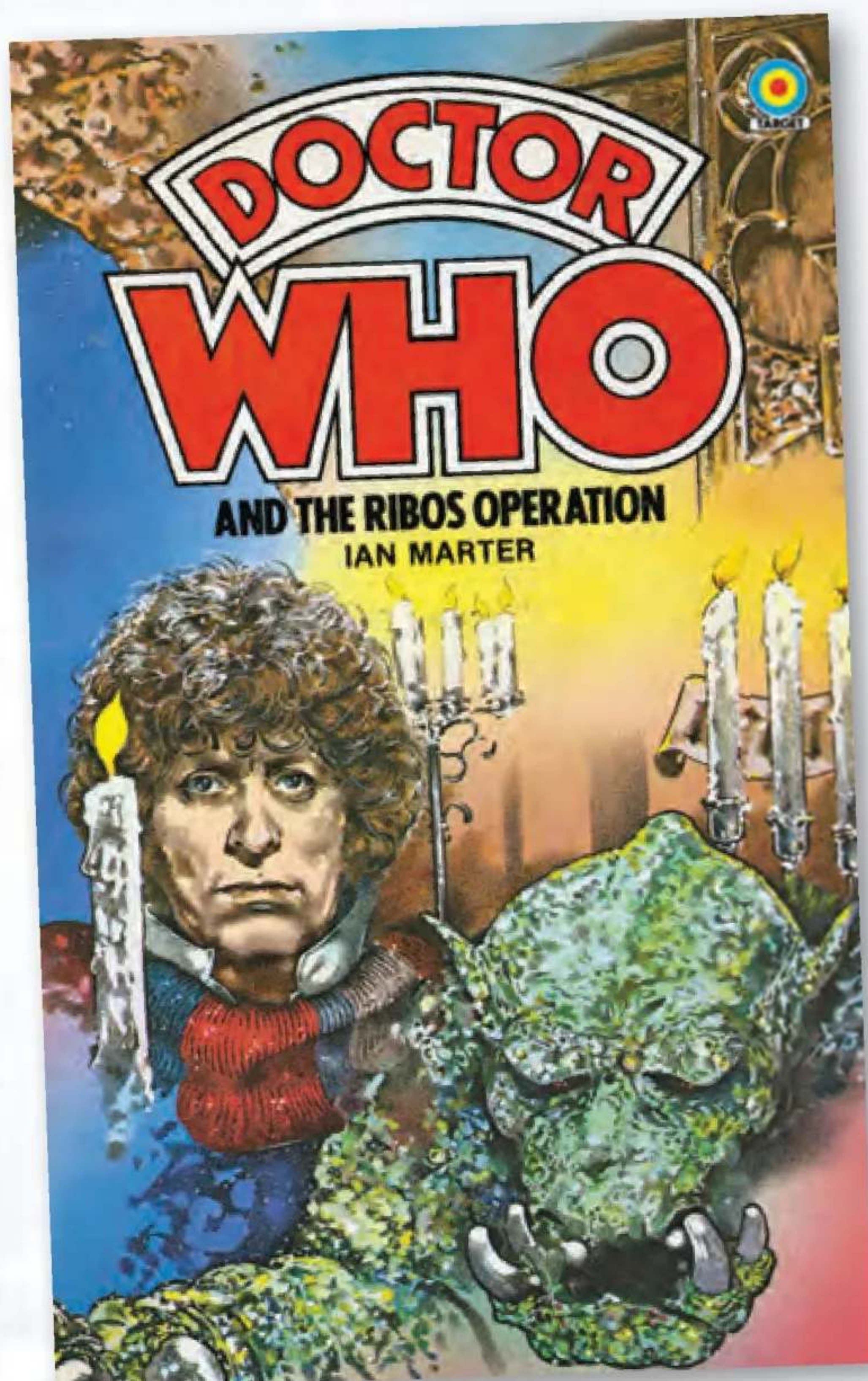
serial. Generally, the story was found to be ‘very exciting and such good fun’ with both the Doctor and Romana being popular characters, while the plot was felt to be less exciting. While Iain Cuthbertson was praised as Garron, the effects and sets were ‘weak and inadequate’.

- The serial was sold to Australia in February 1979 where it was aired uncut with a ‘G’ rating.
- *The Ribos Operation* was sold abroad for broadcast in territories that include United Arab Emirates, Australia, Gibraltar, Saudi Arabia and Greece. It was syndicated in North America from the early 1980s by Lionheart International, and was also broadcast as a TV movie of one hour 35 minutes’ duration.
- *The Ribos Operation* was screened on UK Gold in episodic form from March 1994 and as an omnibus from April 1994. BBC Prime screened the story from April 1999 and it appeared on the Horror Channel from October 2014.

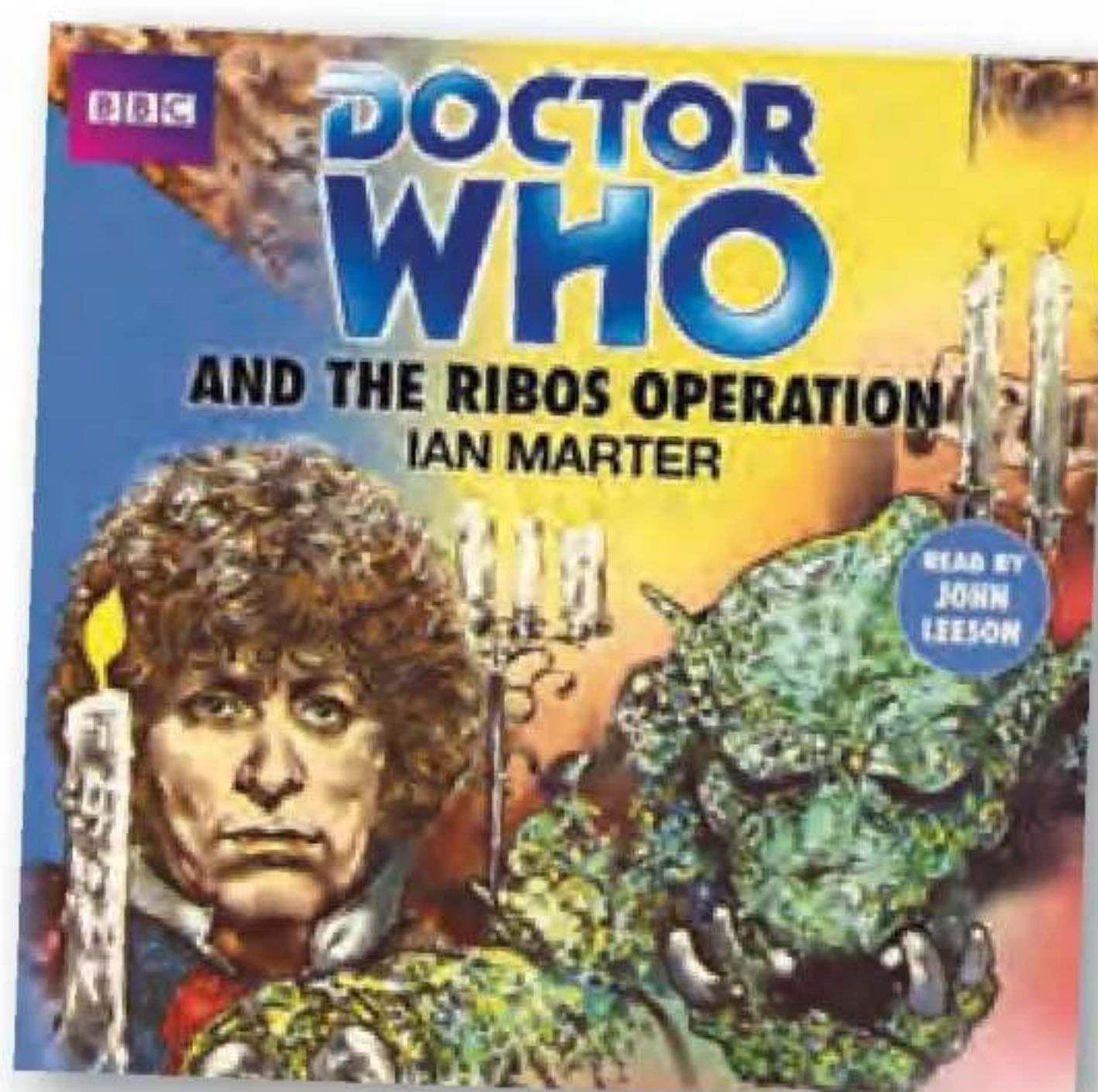
ORIGINAL TRANSMISSION

EPISODE	DATE	TIME	CHANNEL	DURATION	RATING (CHART POS)	APPRECIATION INDEX
Part One	Saturday 2 September 1978	5.45pm-6.10pm	BBC1	25' 02"	8.3M (42nd)	59
Part Two	Saturday 9 September 1978	6.20pm-6.45pm	BBC1	24' 46"	8.1M (36th)	-
Part Three	Saturday 16 September 1978	6.30pm-6.55pm	BBC1	24' 42"	7.9M (38th)	-
Part Four	Saturday 23 September 1978	6.20pm-6.45pm	BBC1	24' 50"	8.2M (36th)	61

Merchandise



The story was novelised by Ian Marter, who reinstated several of the deleted sequences and changed a few spellings (such as making the villain the Graff Vynda-Ka). *Doctor Who and the Ribos Operation* was published simultaneously in December 1979 by Target (paperback) and the parent company WH Allen (hardback) with a cover painted by John Geary. It was later numbered



Left:
The Key to Time video releases sported a spine illustration by Andrew Skilleter.

Below:
The video cover by Colin Howard.

book 52 in the Target library. BBC Audiobooks released *Doctor Who – The Ribos Operation* in March 2011. This five-CD set was read by John Leeson. Although published in the UK, it has a price on the rear of US \$34.95.

The serial was released by BBC Video in April 1995 with a cover by Colin Howard and spine artwork from Andrew Skilleter. The story was released as a Region 1 DVD in October 2002 as part of *The Key to Time* box set. This included a commentary from Tom Baker and Mary Tamm recorded at 4MC on Monday 13 May 2002.

In September 2007, the serial was included on the Region 2 DVD set *The Key*



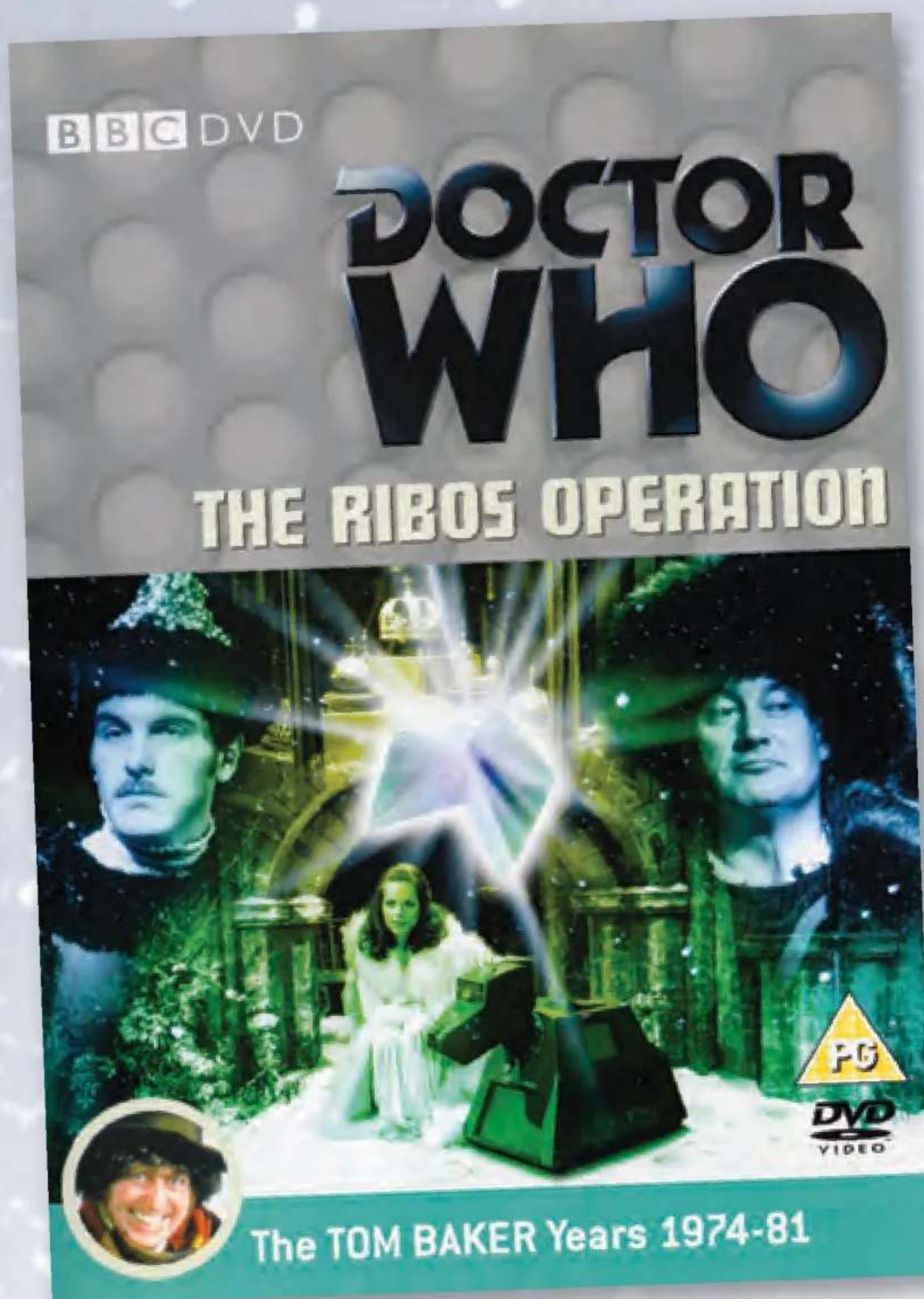
Far left:
The novelisation and audiobook covers by John Geary.

THE RIBOS OPERATION

STORY 98

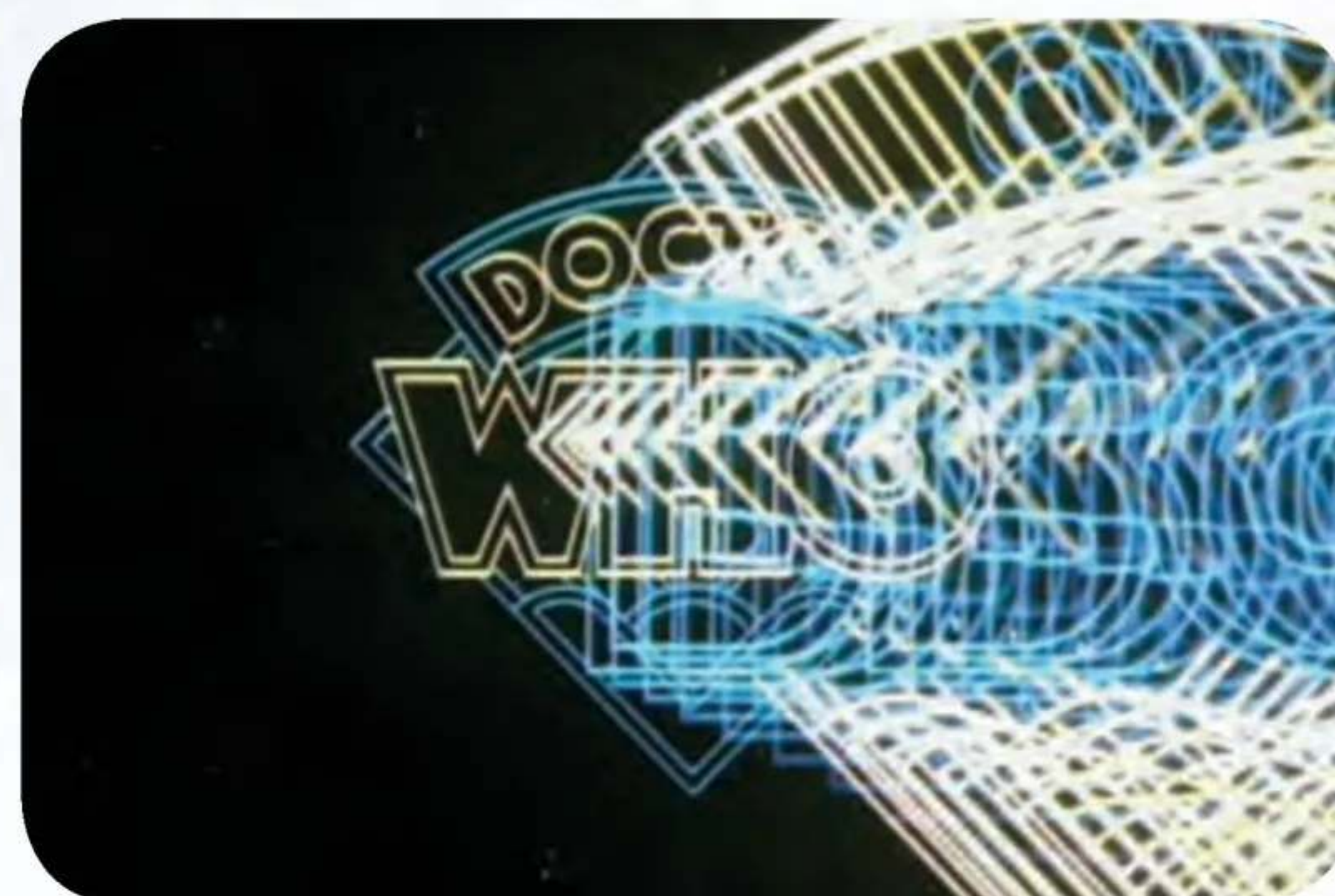
Right:

The DVD cover by Clayton Hickman, and some of the DVD extras.



to *Time*. The special features for *The Ribos Operation* were:

- **Commentary** with Tom Baker and Mary Tamm
- **A Matter of Time** – a documentary exploring Graham Williams' three-year tenure as *Doctor Who*'s producer – with Jackie Williams, Louise Jameson, Anthony Road, Dave Martin, Bob Baker, Mat Irvine, Tom Baker, John Leeson, Gareth Roberts, Lalla Ward, Jeremy Bentham, Colin Mapson, Richard McManan-Smith, Dick Coles, David Fisher, Pennant Roberts, Douglas Adams, Darroll Blake, Michael Hayes, Ken Grieve, Christopher Barry
- **The Ribos File** – cast and crew look back at the making of this story – Nigel Plaskitt, Mary Tamm, Clayton Hickman, Paul Seed, Prentis Handock
- **Continuities** – off-air continuity links from the story's original BBC1 transmission
- **Season 16 trailer**
- **Photo gallery**
- **Coming soon**
- **Radio Times listings** in Adobe PDF format
- **Programme subtitles**
- **Subtitle production notes**
- **Easter Egg** – schedule change



In February 2013, *The Ribos Operation* was also in issue 107 of GE Fabbri's *Doctor Who – DVD Files*.

The CD *30 Years at the Radiophonic Workshop* was released by BBC Enterprises in July 1993, and it included the track *White Guardian's Windbells* from *The Ribos Operation*.

In 1999, Harlequin Miniatures issued models of the Shrivenzale and Garron.

In 2008, the Stamp Centre issued a cover for *The Ribos Operation*. Copies were signed by Mary Tamm. ■

Cast and credits

CAST

Tom Baker Doctor Who
with
Mary Tamm Romana
Cyril Luckham The Guardian [1]
Iain Cuthbertson Garron
Nigel Plaskitt Unstoffs
Paul Seed Graff Vynda-K
Robert Keegan Sholakh
Timothy Bateson Binro [3-4]
Ann Tirard The Seeker [3-4]
Prentis Hancock Captain
Oliver Maguire, John Hamill [1-2]
..... Shrieves
John Leeson Voice of K9 [1,3-4]



UNCREDITED

Barry Sommerford, David Young, Roy Brent, Yuri Gridneff Shrieves
Nick Wilkinson, Stuart Fell
..... Stuntmen/Shrivenzale
Stephen Ismay, Harry Fielder, Derek Chafer, Tony Snell Levithian Guards
Pat Gorman Kro

Above:
Investigating
by candlelight.

CREDITS

Written by Robert Holmes
Incidental Music by Dudley Simpson
Special Sound: Dick Mills
Production Assistant: Jane Shirley
Production Unit Manager: John Nathan-Turner
Lighting: Jimmy Purdie
Sound: Richard Chubb
Visual Effects Designer: Dave Havard
Electronic Effects Operator: Dave Chapman
Video Tape Editor: John Turner
Costume Designer: June Hudson
Make-Up Artist: Christine Walmesley-Cotham
Script Editor: Anthony Read
Designer: Ken Ledsham
Producer: Graham Williams
Director: George Spenton-Foster
BBC © 1978

Left:
The beast
in the
catacombs.

Profile

MARY TAMM

Romana

Mary Tamm was born 22 March 1950 into an immigrant family in Dewsbury in industrial West Yorkshire. Tamm is an Estonian name, meaning 'oak'. Her farmer father Endel had lost four brothers to Stalin's Siberian gulags and fled Estonia in 1945 with partner Raissa Kisseljeva, a Russian opera singer.

Raised in Manningham, Bradford, there Tamm's father packed wool in Lister's Mill. Raissa conducted the local Estonian Club choir and also worked as a singing tutor.

Mary was taken weekly to opera, ballet, plays and piano lessons. It was a creative household; Tamm's older sister Tina once brought home fellow Bradford School of Art student David Hockney.

At Lilycroft Primary School, Tamm's solo of *In the Deep Midwinter* in a Nativity play aged seven showed her power over an audience. She later progressed to Bradford Girls' Grammar School.

Aged 11, Tamm joined Bradford Civic's amateur drama group; at 13 she precociously wrote to John Fernald, Principal of RADA, hoping to study there. In her teens she was part of another drama group with aspiring locals Edward Peel and Duncan Preston.

Tamm turned down a place studying English and drama at Bristol University to train at RADA. Friends and fellow students included Louise Jameson and Sharon Maughan and for a while Tamm's boyfriend was Michael Rushton, drummer in rock band Steamhammer.

Graduating in spring 1971, she joined Birmingham Rep at its new purpose-built home with opening production *First Impressions*, playing Margaret the maid and a neighbour. She went on to appear with Derek Jacobi in *The Lover*, and with Ronnie Barker in *Good Time Johnny*.

She returned to London for rock musical *Mother Earth* (1972, Roundhouse) and soon after took her first film role in *Tales That Witness Madness* (1973).

Tamm's first television work was as a student revolutionary in BBC serial *The Donati Conspiracy* (1973), though her first aired appearance was in ATV police series *Hunter's Walk*, transmitted 8 July 1973.

Early roles came at Granada, in *A Raging Calm* (1974), and as Stan and Hilda Ogden's posh daughter-in-law Polly in two episodes of *Coronation Street*, shown December 1973.

While rehearsing *Coronation Street* she discovered she had won the female lead in *The Odessa File* (1974), a movie to be shot in Munich, her German language skills having helped her get the part. Her blossoming film career then stalled somewhat, with *The Doubt*, to be shot in Greece in spring 1975,

Right:

Mary Tamm in *The Assassination Run* in 1980.



abandoned and *Rampage* (1978), filmed in Sri Lanka, going unreleased in the UK. One highlight was a movie adaptation of TV comedy *The Likely Lads* (1976), playing Terry's Finnish girlfriend Christina. Tamm's dark looks saw her often cast to provide exotic European allure.

Television brought one-off parts in *The Inheritors* (1974), *Warship* (1974), *Public Eye* (1975), *Return of the Saint* (1978) and a lead role in an adaptation of Muriel Spark's novel *The Girls of Slender Means* (1975). When the script called for a nude scene, as the female cast escaped through a rooftop window, the male camera crew and the leading actresses swapped cheeky if tasteful naked pictures of themselves taken by *Radio Times* photographer Don Smith. This displayed Tamm's earthy sense of humour.

Tamm met law student Marcus Ringrose at an *Angels* wrap party in December 1976 and they married 13 January 1978. Ringrose later became an insurance loss adjuster in the City.

In early 1978, Tamm's agent suggested she screen-test for the new *Doctor Who* companion, a shortlist of 200 was whittled down to six. Though initially uninterested, the idea that Romana would be the Doctor's equal intrigued Tamm. Her RADA friend Louise Jameson had been predecessor Leela although, conversely, Jameson had been very popular, giving Tamm concerns she might not match that success.

She discovered she had won the role on returning from her honeymoon and her appointment was announced on 17 February 1978. Rehearsals began 30 March and Tamm's first studio taping for *The Ribos Operation* was on 9 April, with a costume press call coming on 25 April.

Shortly after Romana's screen début on 2 September 1978, Tamm was asked about typecasting on phone-in quiz *Noel Edmonds' Lucky Numbers*; "I don't think I'm *that* well





Above:
As Blanche
Ingram with
Timothy
Dalton as
Mr Rochester
in *Jane Eyre*
in 1983.

known with the viewing audience because some of the TV programmes I've done have been more obscure," she explained. "Because this programme is so popular I think it's a good thing to do because you get seen by lots of people."

Tamm recalled the sparring relationship between Doctor and assistant to *Doctor Who Magazine's* Peter Griffiths in 1998: "We had the perfect set-up where I was this snotty little 500-year-old trying to tell him what to do. It was that very elegant kind of humour, like Cary Grant and Katharine Hepburn, where they played with each other verbally."

Yet she felt the part quickly reverted to type. She said in 1998: "After two or three stories, my character had fallen into the usual pattern of, 'What's that, Doctor?' and 'Look out, Doctor!' and the screaming bit. I realised the part wasn't going to get any more interesting than that, and that's why I only did the one season."

Producer Graham Williams hoped she would return but in the BBC canteen during the making of *The Armageddon Factor* [1979 – see Volume 30] she half-jokingly suggested co-star Lalla Ward replace her.

Tamm's last recording, on 5 December 1978, came just eight months after her first. Negotiations were, however, ongoing with

her agent as Williams angled for Tamm's return, meaning she had no leaving scene.

Negotiations failed and on 16 December Tamm's departure was announced. Lalla Ward was revealed as the new assistant on 6 February 1979.

With Ward playing a second incarnation of Romana, Tamm was not however asked back for a regeneration scene. "I don't know why," she'd later state. "I would have loved to." It should be noted that when Ward's first studio episode was taped in July 1979, Tamm was pregnant, with daughter Lauren being born November 1979.

Typecasting threatened, indeed Tamm would say at a fan event in 1999, "I think [*Doctor Who*] has closed a lot of doors." In truth, her exposure as Romana possibly gained her as many jobs as it lost.

Australian director Ken Hannam was unaware of her *Doctor Who* role and cast her in three-part BBC spy thriller *The Assassination Run* (1980) and its sequel *The Treachery Game* (1981).

TV guest roles included a one-off reunion with *Likely Lads* star James Bolam in sitcom *Only When I Laugh* (1981) but she also enjoyed a lengthy theatre run in Agatha Christie's *Cards on the Table* (1981/2, Richmond Theatre/Vaudeville Theatre).

Right:
In *Paradise
Heights*
in 2002.



**Left:**

As Orlanda in *EastEnders* in 2009.

Tamm was interviewed on *Pebble Mill at One* to mark *Doctor Who*'s 20th anniversary, mentioning her appearance in *Jane Eyre* (1983) and also plugging forthcoming sitcom *The Hello Goodbye Man* (1984). Written by David Nobbs, Ian Lavender starred as a hapless salesman, with Tamm as female lead Jennifer Reynoldston. Despite its pedigree it lasted just six episodes.

She began to attend *Doctor Who* conventions and after current producer John Nathan-Turner saw her in cabaret at a Chicago event he cast her in panto *Cinderella* (1984, Gaumont Theatre, Southampton).

She made a film appearance in *Three Kinds of Heat* (1987), being shot dead by Sylvester McCoy, six months before he was cast as the Seventh Doctor.

One-off TV roles came in *Bergerac* (1984), *Worlds Beyond* (1986), *Casualty* (1989) and *Poirot* (1989) and she remained busy on stage in *Good Morning Bill!* (1984, Ashcroft Theatre, Croydon), *Present Laughter* (1988, Theatre Royal, Windsor) and the more experimental *Why is Here There Everywhere Now?* (1992, Riverside Studios).

Early 90s TV work consisted of guest slots in *Perfect Scoundrels* (1991), *The Bill* (1991) and crossword quiz *Crosswits*, before being cast as Penny Crosbie in Channel 4 soap *Brookside* from December 1994, remaining for 18 months and over 70 episodes.

Post-*Brookside* parts included *Crime Traveller* (1997), *Heartbeat* (1997), *The New Adventures of Robin Hood* (1997), *Loved by You* (1998) and *CI5: The New Professionals* (1999).

Tamm continued to tread the boards, as Beverley in *Abigail's Party* (1999, Chichester Festival Theatre/Gordon Craig Theatre, Stevenage) and in tours of *The Rise and Fall of Little Voice* (2000), *Dead Funny* (2001), *Mixed Feelings* (2004) and *Private Lives* (2006).

Twenty-first century TV work included *Doctors* (2000/2006/2007), *Jonathan Creek* (2001), *The Bill* (2001), *Paradise Heights* (2002), *Twisted Tales* (2005), *Rose and Maloney* (2005), *Holby City* (2006), *Diamond Geezer* (2007) and *Wire in the Blood* (2008). There was further soap with two episodes of *Coronation Street* in 2002, as Diana Black, while in 2009 she was Russian scammer Orlanda in several *EastEnders* episodes.

Tamm's series of *Doctor Who* was issued on DVD in 2007 and she contributed heavily, including presenting a featurette.

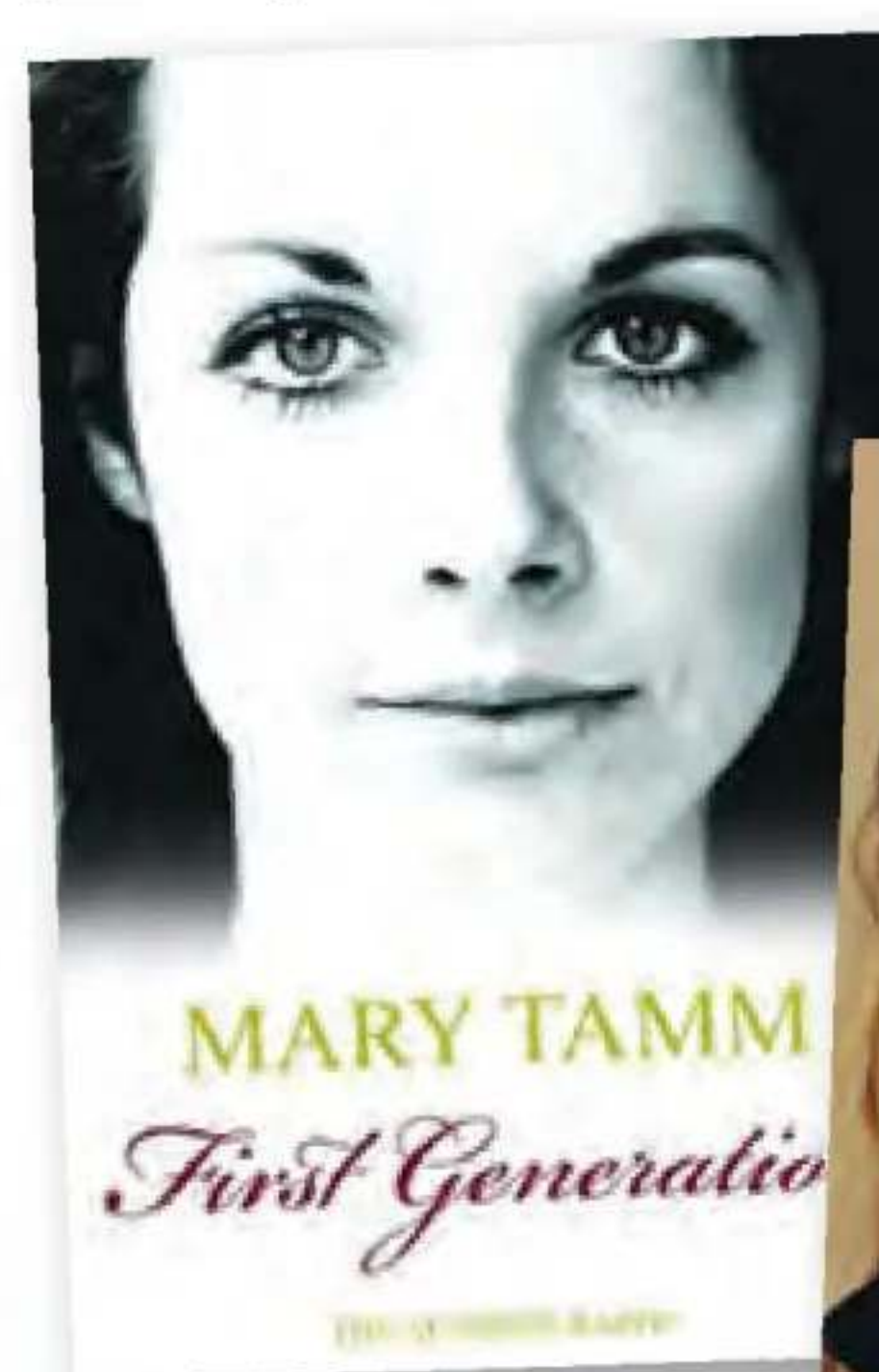
She appeared in several episodes of Big Finish's *Gallifrey* audio series as Pandora from 2005 and narrated a few *Companion Chronicles* stories from 2009.

Diagnosed with cancer in late 2010, despite undergoing chemotherapy, Tamm died at home in Battersea on 26 July 2012, aged 62. Doubly tragic, on 7 August husband Marcus died suddenly at home, just hours after delivering her funeral eulogy; a cardiac issue was later diagnosed. The couple were survived by her daughter Lauren and her son Max.

Tamm wrote two autobiographies: *First Generation* (2009) and *Second Generation* (2014),

the latter published posthumously.

Her final role was reprising Romana in a series of Fourth Doctor audio adventures, recorded March 2012 just months before her untimely death, and released posthumously in 2013. ■

**Left:**

The two volumes of Mary Tamm's autobiography.

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